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ABSTRACT

A research project developed a business-education partnership model for use by the Whatcom County Tech Prep Consortium (or any other consortia) seeking to establish successful collaborative efforts between education and business. Methodology included the following: a survey of the Washington State Tech Prep Director's Association; two telephone interviews with directors of National Demonstration Sites; and a telephone interview with Dale Parnell, an authority on business-education partnerships and tech prep programs. Through the review of literature and resulting survey/interview questions, common qualities and characteristics, organizational structures, and implementation strategies were identified that could be used to develop successful partnership efforts. Ten components critical to successful implementation of business-education partnerships were identified: awareness, coordination, recruiting, planning, relationship, motivation, commitment, retention, recognition, and evaluation. Implementation strategies were suggested for each component. Four issues were recommended for examination: a need for assessment of the long-term effectiveness of partnership efforts; a need for consistent, measurable standards to evaluate partnerships; a need for a standardized language to describe successful partnerships; and a need for regionalizing business-education partnership efforts. (Contains 121 references. Appendixes include survey instruments and summary of survey and interview responses.) (YLB)

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ED 376 317

A MODEL FOR DEVELOPING BUSINESS-EDUCATION PARTNERSHIPS FOR TECH PREP PROGRAMS

A Field Project
Presented to
The Faculty of
Western Washington University

In Partial Fulfillment
of the Requirements for the Degree
Master of Education

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by
Linda A. Cowan
July 1994

CE 067 599

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BUSINESS-EDUCATION PARTNERSHIPS
FOR TECH PREP PROGRAMS

by

Linda A. Cowan

Accepted in Partial Completion
of the Requirements for the Degree
Master of Education

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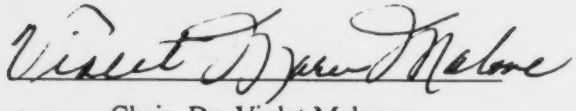

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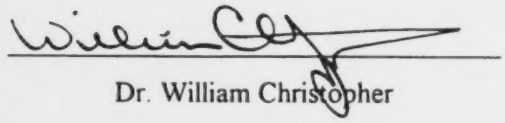

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FIELD PROJECT

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ABSTRACT

This research project was designed to develop a business-education partnership model that could be used by the Whatcom County Tech Prep Consortium (or any other consortia) seeking to establish successful collaborative efforts between education and business.

Five key research questions guided the search for information about partnership programs. The Washington State Tech Prep Director's Association was surveyed because it has established business-education partnerships (consortia) throughout the state that are dealing specifically with School-to-Work/Tech Prep partnership issues. Three telephone interviews were also conducted for this study. Two of the interviews were with directors of National Demonstration Sites and the other was with Dr. Dale Parnell, a highly regarded authority on business-education partnerships and Tech Prep programs. Through the review of literature and resulting survey/interview questions, common qualities and characteristics, organizational structures and implementation strategies were identified that could be used to develop successful partnership efforts.

Ten components that are critical to successful implementation of business-education partnerships were identified. The components (model) can be used as a suggested guide to planning partnership efforts. Several variables that could impact the level of success that a partnership might experience were also identified. As a result of the variables, the research suggests it is nearly impossible to create a "standard" model of a successful partnership that can be consistently replicated in all situations.

It is recommended that further efforts focus on the development of more accurate assessment tools and evaluation strategies that can be used by researchers or partnership groups when evaluating the long and short-term effectiveness of partnership efforts.

TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION **1**

Need for the Study 3

Significance of the Study 4

Research Questions 6

Methodology 6

Definition of Terms 7

CHAPTER TWO: REVIEW OF LITERATURE **15**

Historical Perspectives of Partnerships 16

Current Trends in Partnership Programs 18

Tech Prep Defined 20

School-to-Work Transitions 22

Business-Education Partnership Models 24

Elements of Successful Partnerships 27

Barriers to Successful Partnerships 29

Benefits of Business-Education Partnerships 31

Summary 34

CHAPTER THREE: METHODOLOGY **35**

Sample Selection 35

Instrument Selection and Design 38

Data Collection Strategy 39

Data Analysis 41

CHAPTER FOUR: RESULTS **42**

Survey and Interview Results 43

Summary 53

CHAPTER FIVE: CONCLUSIONS & RECOMMENDATIONS **54**

Conclusions

A Model for Developing a Successful Partnership 55

Human Interrelationships Affect Partnership Efforts 70

Developing Sustained Involvement in Partnerships 71

Recommendations 72

BIBLIOGRAPHY **76**

APPENDICES

A. Business-Education Partnership Survey, Cover Letter and Memo 85

B. Interview Questions 90

C. Summary of Survey and Interview Responses 92

D. Partnership Opportunities for Business 107

LIST OF TABLES

TABLE I: Survey Respondents 36

TABLE II: Interview Respondents 37

TABLE III: Components of Successful Business-Education Partnerships 55

CHAPTER ONE
INTRODUCTION

An emerging educational reform movement is the Tech Prep/Associate Degree (TPAD) program. Tech Prep is a sequence of study beginning in high school and continuing through at least two years of postsecondary occupational education. The program parallels the college prep course of study and presents an alternative to the general education (minimum-requirements) diploma. It prepares students for high-skill technical occupations and allows either direct entry into the workplace after high school graduation or continuation of study which leads to an associate degree in a two-year community or technical college.

Tech Prep began with the design and testing of a few experimental programs during the late 1970s and has evolved over the last ten years into the concepts we know today. It was with the publication of Dr. Dale Parnell's book (1985), The Neglected Majority, that the concept of Tech Prep gained national attention. Parnell proposed the Tech Prep concept as a high school alternative to college prep programs and proposed the term *Tech Prep/Associate Degree* for an educational program targeting the middle fifty percent of high school students. The idea was to give purpose, direction, and meaningful study to non-college bound, general education track high school students helping prepare them for community and technical college programs through well-defined, occupationally related, articulated curricula.

Tech Prep/Associate Degree is far more than a theoretical possibility. Successful Tech Prep models have been launched across the country and over one thousand Tech Prep consortia (Hull, 1993) have begun planning, designing, and implementing programs. The ultimate success and endurance of this important national educational reform depends upon the ability of educators, employers, and community leaders to capture the Tech Prep vision and make it an institutional reality--nationwide.

Enough enthusiasm, documented success, and political persuasion were generated to make Tech Prep the new focal point of the 1990 Congressional reauthorization for the Carl D. Perkins Vocational and Applied Technology Act. The legislation provides secondary, postsecondary and adult vocational education programs with federal funding assistance for the time period of July 1, 1991 - June 30, 1996 (The AVA Guide to the Carl D. Perkins Vocational and Applied Technology Act of 1990). The U.S. Congress authorized the government to spend up to $125 million on Tech Prep programs. The majority of the funding is allocated to states via Title III, Part E, of the Perkins legislation (The AVA Guide to Federal Funding For Tech Prep, 1993). A key section of this legislation provides funds to States to help them develop Tech Prep education systems that will provide new and innovative approaches to vocational education, not continuation of existing programs. Each State received a share of the Federal Perkins dollars. During 1993-94 Washington State received 1.96 million; a total of just over five million for the past three years of funding, 1991-1994. The money was then allocated to consortia throughout the State via a competitive grant application process. To qualify for a grant award, a consortium must meet a number of criteria standards; two in particular are pertinent to this study:

- Federal dollars are given to the State Board of Community and Technical Colleges to allocate to a *consortium* of schools (money is not given to individual schools). Grant funds are fiscally managed by a postsecondary institution.
- To qualify, the consortium must meet a "membership" standard. There must be at least one secondary and one postsecondary institution (technical or community college and/or a four year university) plus *equal* representation from local business, industry, labor, community, government, parents, and students. There must be 50% education participation and 50% business/community participation.

Need for the Study

The Whatcom County Tech Prep Consortium has been operating for the past three years. Year one was devoted to initial interest discussions with area educators. During year two a consortium was formed with a membership representation of 50% education and 50% *business* (in this paper the term *business* will represent the interests of business, industry, labor, government, community) as mandated by the grant guidelines. Meetings were held at a time convenient for educators and most meeting discussions focused on education issues related to the implementation of Tech Prep at the building level. By the end of year two most of the business representatives had stopped attending meetings, although they still declared an interest and belief in the Tech Prep concepts. As year three unfolded (1993-94) the consortium began with strong education membership (thirteen) but only four business representatives who attended the meetings. As of this writing (one-half way through the current school year) the consortium has one active government agency representative and the other business people have stopped attending meetings.

When the Consortium director asked the business people why they were not attending, the most common reasons given were

- I felt like I didn't have anything to contribute to the meetings.
- I didn't feel like there was a purpose or reason for me to be there.
- Too much education jargon (educational-ese); I felt lost most of the time.
- Inconvenient meeting time.
- When there is an assignment for me to do, or a part for me to play then I will be back.

There seemed to be a general feeling among the business people that they were not really adding anything to the program except their verbal or written approval for the grant proposal (a rubber stamp to a program that "education" had created). Studies have shown that the most effective consortia and strongest Tech Prep programs have foundational support and active involvement from the local business organizations (Bragg, 1992;

Hull, 1992; Hull & Parnell, 1991). The purpose of developing a Tech Prep program through a consortium (team) effort is to have the advantage of combining the individual strengths of all participating entities who will contribute to a unified and complete program. According to Hull (1992):

> A successful Tech Prep consortium is one that has closed all gaps in understanding and cooperation between levels of education and between education and the workplace in order that a common vision for Tech Prep may become a reality. Closing those gaps requires input, participation, and a recognition of interdependency by secondary, and postsecondary educators and employers (p. II.A.1).

There is a distinct difference between a Tech Prep consortium that merely involves its participants and a Tech Prep consortium that takes a team or partnership approach. Clearly, the Whatcom County Tech Prep Consortium needs to examine ways to create this partnership; ways to gain support from and actively involve the local business groups--the employers, employees, government agencies, and community organizations.

Significance of the Study

Active participation by business, industry, and labor is viewed as a critical feature of Tech Prep implementation (Bragg, 1992; Hull & Parnell, 1991; Parnell, 1985). Employers, who as a group have voiced concerns about the workplace readiness of youth (key issues cited in the SCANS report, What Work Requires of Schools, 1991), have become important partners in the building of some Tech Prep consortia and more educational institutions are seeking their involvement in guiding the development of local Tech Prep programs (Silverberg, 1993). Business involvement is also underscored by the stipulation in the Perkins legislation that special funding consideration be given to consortia developed in consultation with business, industry, and labor groups.

The Whatcom County Tech Prep Consortium recognizes the importance of developing education and private sector partnerships to ensure work-relevant learning experiences for students. Skills demanded by today's businesses and industries are not limited to advanced technical skills but include strong academic and interpersonal skills.

Business, industry, and labor representatives should be involved in defining needed competencies and skill levels and establishing performance standards for Tech Prep students who will be their future employees. To better prepare students for the workplace and for life, education and the private-sector must collaborate and coordinate educational and work experiences (Illinois Tech Prep Planning Strategies, 1991).

There are currently 23 consortia groups operating in Washington State (State Board of Community and Technical Colleges, 1994), and well over one thousand (Hull, 1993) operating throughout the United States. All consortia are mandated to include partnerships between education and business. There are numerous publications that extol the value of business involvement in Tech Prep consortia, but few that provide help in how to make it happen. Since Tech Prep programs and consortia are fairly new to Washington State (three years) there are few model programs to emulate.

As a result of the Whatcom County Tech Prep Consortium's need to develop a sustained business partnership, this project focused on the role of business-education partnerships and their relationship to the current education reform efforts commonly referred to in Washington State as School-to-Work Transitions. The project was designed to develop a Tech Prep partnership model that could be used by consortia as a basis for creating successful collaborative efforts between education and business.

Research Questions

To develop a business-education partnership model that can be used as the foundation for the organizational structure of the Whatcom County Tech Prep Consortium, the following questions were addressed.

1. What are the benefits of business-education partnerships?
2. What are the best strategies to use to gain sustained involvement in business-education partnerships?
3. What is the most effective organizational structure to use in building a model business-education partnership?
4. What are the key characteristics of a successful business-education partnership?
5. What are the barriers to implementing a successful business-education partnership?

Methodology

The following methodology was used to answer the research questions.

1. A review of the literature on business-education partnerships including information on historical perspectives, school-to-work transition efforts, Tech Prep programs, qualities and characteristics of successful partnership models and their structural components was completed.
2. Through the use of a survey, information and recommendations related to partnership models in Washington state were sought from Tech Prep consortium directors and State School-to-Work/Tech Prep coordinating agencies.
3. Telephone interviews were conducted with several directors of selected National Demonstration Sites across the United States.
4. A telephone interview with Dr. Dale Parnell was conducted.
5. Following the literature review, surveys and interviews, the compiled information was analyzed, with the results forming the basis for addressing the research questions and developing the model partnership program.

Definition of Terms

The following terms are frequently referred to in the School-to-Work/Tech Prep initiative and program materials. Definitions are provided to clarify understanding and terminology.

Advanced Placement - A process that allows students to time shorten programs and eliminate course redundancy when required courses have been previously completed (at another institution). Advanced Placement is often granted when certain courses are waived at the postsecondary level.

Advanced Standing - A process through which a student may be eligible to receive credit for all or part of a course due to competencies mastered previously. The determination of Advanced Standing is made by each community or technical college upon a student's enrollment in a program.

Applied Academics - The presentation of subject matter in a way that integrates a particular academic discipline (such as mathematics, science, or English) with workforce applications. They serve as the foundation for Tech Prep programs and are not watered-down courses.

Apprentice - A worker at least 16 years of age, except where a higher minimum age is required by law, who has entered into a voluntary written agreement to learn an apprentice occupation under standards approved by the State Apprentice Council.

Apprenticeships - Are prescribed learning experiences in which an individual, called an apprentice, learns a specific trade through several years of on-the-job training and related instruction. On-the-job training covers all aspects and parts of a particular occupation. The program usually involves cooperation among schools, labor, and management, since apprentices learn the skills of their craft through on-the-job work experiences, and related theoretical information through(out) classroom instruction. The minimum terms and conditions of apprenticeships are regulated by state and local statutes or a written apprentice-training contract.

Apprentice Occupation - A skilled trade which (a) is customarily learned in a practical way through training and work on-the-job, (b) is throughout an industry, (c) is not a part of an occupation previously recognized by the Council as apprentice trade, (d) involves manual, mechanical or technical skills and knowledge which require a minimum of 2000 hours of on-the-job supervised training, (e) requires related instruction to supplement on-the-job training.

Articulation - A process for linking two or more educational systems within a community to help students make a smooth transition from one level to another without experiencing delays, duplication of courses, or loss of credit. Horizontal articulation generally refers to student transfer of credit from one institution to another at the same level. Vertical articulation refers to the transfer of credits from a lower level institution to a higher level one (secondary to postsecondary).

Articulation Agreements - Written agreements between the local school system and the postsecondary institution that are signed early in the developmental stages of Tech Prep. Articulation agreements allow high school students the opportunity to avoid duplication of course work by identifying specific courses that are eligible for college credit after certain skill competencies have been met.

Associate Degree - A form of recognition offered for a two-year program when all curriculum and degree requirements have been met.

Benchmarks - Steps that students must take to master a specific skill. Benchmarks are the skill levels that a student should reach at specified grade levels.

Career Cluster (Path) - A Tech Prep curricular approach designed to build stronger foundations, provide opportunities for student choice and increase competency levels. This approach is based on the concept that many clusters of occupations require common skills and knowledge. It is possible, therefore, to design a curriculum that has a core of courses common to several related specialties. All students in the cluster take the core classes, approximately 80% of the curriculum, and then branch out in specialty areas. The course of study combines

academic and technical (vocational) subjects. Examples of career clusters are: Business/Marketing, Environmental/Natural Sciences, Health/Human Services, Industrial Technology, etc.

Career Education - A lifelong, educational process in which every student is involved Ideally, a component of the K-12 curricula. Components of career education include (a) knowledge of self, (b) valid occupational and educational information, and (c) career planning/decision-making.

Carl D. Perkins Vocational and Applied Technology Education Act of 1990 (PL101-392) - The new federal Vocational Education Act that provides funding for approved vocational technical education programs from July 1, 1991 through June 30, 1996. The purpose of the Act is to make the United States more competitive in the world economy by developing more fully the academic and occupational skills of all segments of the population. The act addresses youth and adult vocational educational programs and also academic and occupational skills. It provides funding for Tech Prep programs.

Competency Based Education - An organizational structure for teaching/learning which requires description in advance of the knowledge, skills and attitudes that a student must possess upon exit from a program or course. Competency based curricula clearly identify expected outcomes, organize instruction based upon performance standards, and evaluate student performance based upon mastery of competencies.

Contextual Learning - Learning that focuses on making the learning environment as rich as possible in multifaceted learning opportunities. Multiple intelligence's, multiple learning style, theory, and various teaching approaches (i.e., experimental, holistic, applied) are included.

Cooperative Education Programs - A form of work-based learning. Cooperative education programs combine classroom activities with actual work experiences.

Core Abilities - The transferable skills essential to an individual's success regardless of occupation or community setting. These skills are regularly identified by employers, employees, and educators as essentials to lifelong learning: (a) work productively, (b) think critically and creatively, (c) act responsibly, (d) communicate clearly, (e) learn effectively, (f) value self positively, and (g) work cooperatively.

Employable Skills - Attainment of competence in the basic and applied academic, technical, and workplace readiness skills. Non-technical skills that employers indicate would be valuable for any worker to have--reliability, critical thinking and problem solving, understanding of bottom line accountability, and the ability to be a team player and self-starter are often mentioned by employers as basic to occupational success.

Equity - A term that implies that every student is able to achieve his/her potential and is not limited by false expectations or stereotypes due to gender, race, national origin, culture, socio-economic class, religion, language, disability or any other factor which might separate a student or group.

High Performance Work Place - A work place that has adopted standards of quality and high performance that now characterize our most competitive companies (SCANS Report, see SCANS Competencies).

Integrated Curriculum - Combining two or more vocational and/or academic subjects into one course that focuses on the application of skills and knowledge.

Internship - A supervised work-based learning experience which links a student (or teacher, counselor) with an employer for a planned set of activities often designed to give the student a broad overview of a business or occupational field.

Job Corps - A federally funded job training program for disadvantaged youth ages 16-24. The program is designed to help participants gain skills that prepare them for the work world after the GED high school equivalency certificate is completed.

Most Corps sites are residential and offer full room, board and health benefits during the several-month training period.

Job Training and Partnership Act (JTPA) - A federally funded job training program for the economically disadvantaged and those affected by plant closures and layoffs (dislocated workers). State and local agencies decide what training will be offered, and local business executives, who are members of private industry councils, decide how funds will be spent.

Job Shadowing - An opportunity for a student to follow a worker through a typical sequence of activities so the "shadower" learns some of the skills and tasks required in that occupation; often arranged for only a few hours.

Mentoring - to provide "trusted and experienced supervisors or advisors who have personal and direct interest in the development and/or education of younger or less experienced individuals" (Thesaurus of ERIC Descriptors). For example, job sites may have a mentoring program for new employees where an experienced worker is assigned to assist newcomers in their learning about and adaptation to the work site. Many school districts are now working with community members to serve as mentors.

Neglected Majority - The high school audience for which Tech Prep programs were originally designed. Most often involves the middle 50% of the students who are in an unfocused general education program.

Occupational Advisory Committee - A committee composed of representatives of business, labor, and industry (related to the program area) designated to provide advice on professional technical education in a specific program area. Advisory committees assist with program planning and evaluation activities.

Performance Assessment - An examination which requires a student to produce an answer or product, not necessarily in a standardized format, that demonstrates his or knowledge or skills.

Performance Based Education - See Competency Based Education.

Portfolio - A purposeful collection of work performed by the student that tells the story of effort, progress or achievement. Portfolios include a mix of student work samples, performance assessments, test scores and ongoing student evaluations. It is an assessment tool for students to demonstrate mastery of knowledge and skills in a specific area.

Portfolio Assessment - A judgment of the quality of a collection of student work or a series of student performances made by the student, a teacher, or an independent evaluator.

SCANS - The Secretary's (U.S. Department of Labor) Commission on Achieving Necessary Skills.

SCANS Competencies - Descriptions of work-ready level of proficiency reported in What Work Requires of Schools: A SCANS Report for America 2000. The competency categories include five areas: (a) resources, (b) interpersonal skills, (c) information processing, (d) understanding systems, and (e) selecting, applying and using technology. The report also includes three Foundation Skills (human skills): (a) basic skills--reading, writing, speaking, etc.; (b) higher-order thinking skills; (c) personal qualities--self-esteem, self-management, integrity, etc.

School-To-Work Transition - An initiative that strives to ensure that today's young people be adequately prepared for the future workforce within the states and the nation.

Service Learning - A strategy to combine community service with learning activities to allow students to learn and develop through active participation in thoughtfully organized service experiences that meet actual community needs and that are coordinated in collaboration with the school and community. The service activity is integrated into the students' academic program and there is structured time for the student to think, talk, or write about the actual experience.

Structured Work Experience - A program which correlates the value of classroom education and job performance, is an integral part of students' educational plans, and is supervised by the school. Such experiences include, but are not limited to, cooperative work experience, internship, mentorship, on-the-job training, apprenticeships and clinicals.

Tech Prep - Is a sequence of study beginning in high school and continuing through at least two years of postsecondary occupational education. The program is designed to meet the need for high school graduates to have more technically oriented educational backgrounds. Through a blending of higher level academic and technical (vocational) courses, Tech Prep prepares students for the advanced courses required by two-year technical and community colleges.

Tech Prep Associate Degree Programs (2+2 TPAD) - A four year articulated secondary and community college professional technical and academic program where courses are sequenced to provide maximum continuity and breadth. Programs incorporate applied academic study as well as infuse academic concepts into professional technical courses. College credit and/or advanced standing is often earned while in high school. The program progresses to more advanced technical training and usually culminates in an associate degree at the community college.

Tech Prep Consortium - Partnerships between secondary/postsecondary institutions and business/labor/industry that are funded to implement and promote Tech Prep initiatives throughout the United States.

Technology Education - An applied discipline designated to promote technological literacy which provides knowledge and understanding of the impacts of technology including its organization, techniques, tools and skills to solve practical problems and extend human capabilities in areas such as construction, manufacturing, communication, transportation, power and energy.

Total Quality Management (TQM) - A method of site-based management where statistical controls are used to measure success and progress. Everyone is involved in decision making and quality control.

Vocational Education - "Formal preparation for semiskilled, skilled, technical or paraprofessional occupations, usually below the BA level" (Thesaurus of ERIC Descriptors). There are several variations of the term. For instance, while Idaho uses the term "vocational education," Oregon uses "professional-technical education," and Washington uses "vocational-technical education."

Work-based Learning - A competency-based educational experience that coordinates and integrates classroom instruction with structured work site employment in which the student receives occupational training that advances student knowledge and skills in essential academic learning requirements. It includes deliberate strategies for linking student experiences at work sites with the content and outcomes taught in schools and classrooms.

Workforce 2000 - A landmark federal study now almost two decades old. It concludes that because of demographic changes the future workforce will have larger numbers of minorities and women. Employers will face greater needs for training.

CHAPTER TWO
REVIEW OF LITERATURE

The review of literature examines the evolution of and current trends in business-education partnerships with a focus on partnership efforts established since 1985. This year was selected to help narrow the focus and ensure that the models were current, had a "history" of success or were evolving from current educational reform efforts. Specifically, the review of literature is divided into four key areas:

- **Historical perspectives** were examined to help provide a scenario of past practices related to partnership efforts occurring in the United States.
- **Current trends** in partnership efforts such as school-to-work and Tech Prep initiatives were reviewed. The areas were selected for their applicability to the education reform efforts being implemented by the Whatcom County Tech Prep Consortium.
- **Model business-education projects** were examined for applicable criteria established by this projects parameters. In particular, partnership projects that were identified by the research authors as "successful" were reviewed for common qualities and characteristics and effective implementation strategies. Vocational education partnership models were also reviewed because of their long standing history of involvement in school-to-work training opportunities for students.
- **Benefits of business-education partnerships** were reviewed as a potential source of information about motivation for involvement in partnership programs.

Sources for this review included searches of the following databases: Educational Resources Information Center (ERIC), including Current Journals in Education and Research in Education (RIE); and INFORM (Business Database). Searches were

conducted in the card catalogs at Western Washington University and the database located at the Northwestern Curriculum Coordinating Center located at Clover Park Technical College. Related information was obtained from Washington State Tech Prep consortia directors, State School-to-Work/Tech Prep officials (Olympia offices) and individual interviews with several project directors of National Demonstration Sites. Published training manuals, partnership handbooks and resource guides were also reviewed as a potential source of information about the "how-to's" of creating a business-education partnership model.

Historical Perspectives of Partnerships

The idea of business-education partnerships is not new. Cetron (1985) points out that partnerships have existed as far back as the 1860s when the New York City Chamber of Commerce had representatives on the school board of the Merchant Marine Technical School, a public school in the New York City system. Serving on school boards has traditionally been one of the most important ways of involving business with the schools. As described by Timpane (1984), for the first half of this century the involvement of business in education was pervasive. Almost all school board members were business or professional men, and public school management was modeled on business management principles.

In 1906 an organization called the National Society for the Promotion of Industrial Education was established (Hoyt, 1991). Its efforts focused on providing non-college bound youths with the specific vocational skills required for entry level industrial jobs. This type of "cooperative education" was identified as the oldest and most enduring form of partnership between business and education. By the 1930s, parents and policymakers looked to the schools as a job training place for their children; education was viewed as a means to a secure and better place in the workforce. Youth agencies established by the New Deal (Turnbaugh, 1987) remained apart from the public schools, but in performing a service for large numbers of youth who were casualties of the Depression, also managed

to reinforce ties between the schools and business. The prodigious expansion of the public schools after World War II turned out to be the last page of this chapter in the history of business involvement in the schools.

During the mid-to-late 1960s and into the 1970s, the context of educational policy making changed swiftly, and as a result, business began withdrawing their participation on local school boards. New educational issues were on the horizon and with the issues came new policy concerns and activists (see Timpane, 1984 for a discussion of this period of involvement). As Trachtman (1988) explained:

> It was a time in which school boards became both the site of fierce battles among various community groups and springboards for local politicians or those with political aspirations. Serving on school boards meant dealing with politically volatile issues and often demanded enormous outlays of time and considerable personal commitment. Business generally did not want to play this role and hence withdrew (p. 207).

From the mid-1960s to the late 1970s business leaders became increasingly distant from schools. One important exception has been the continuous participation of companies in vocational, cooperative, and career education programs. During this same time business leaders felt they could afford to be passively critical of education because of the plentiful supply of qualified entry level workers among the very large numbers of young people born during the postwar baby boom and among women reentering the labor market.

During the past ten years, business leaders have been gradually reestablishing connections with public education. In the early to mid 1980s there was considerable alarm about productivity problems in both work and schooling in the face of powerful new challenges from Japanese and German competition (Wirth, 1993). Changes in the labor supply also sparked business with a renewed interest in education. Both industry and education were under pressure to "reform."

Business leaders have come to understand that the emerging labor supply problem is essentially an education problem. Of all the recent changes in the landscape of American education, none has been more dramatic and swift than the reappearance of the business sector. As Timpane (1984) points out, nowadays, no analysis of educational

performance fails to mention either the need for improved skills in the labor market or the need for improved productivity that will enable the United States to compete successfully in the global economy. The conditions that exist in today's workplace have changed dramatically since the early 1900s.

The business-education partnership movement has gained momentum as one way to infuse new energy, ideas, resources, commitment, and spirit into achieving a national goal: schools should be preparing students for a productive future. Advocates from every level of society have recognized the obvious benefits of merging the resources of the public and private sector (Zacchei & Mirman, 1986). Business-education partnerships are being developed against a background of major legislative reform (most currently President Clinton's Goals 2000 legislation) at both the national and state level.

Numerous case studies have illustrated that the partnership motivation is strong on both sides (Hull & Parnell, 1991; Lacey & Kingsley, 1988; Levine & Trachtman, 1988; National Alliance of Business, 1987; Zacchei & Mirman, 1986). Businesses refer to their own self-interest and their role as corporate citizens; educators point to their need to provide relevant education for young children and their appreciation for the expertise that is available in the business community (O'Connell, 1985).

Current Trends in Partnership Programs

In the earlier part of this century, the industrial system in the United States was second to none in the world; business was booming, jobs and labor were plentiful. Our industries flourished because of our economic strength, mass manufacturing techniques, superior factories and equipment, and a workforce composed of strong managers and capable, compliant front-line workers. For most workers, knowing how to read or having a strong back was all it took to get a good job. A college degree was considered a sure road to economic and professional success and a guarantee of a superior lifestyle. This concept became the basis of the American dream and has persisted into the present, even

as the reality of the American job market has shifted (Commission on the Skills of the American Workforce, 1990).

For many years, non-college educated workers also felt assured of a comfortable, middle-class lifestyle if only they remained persistent. There were plenty of jobs in labor and industry for unskilled workers and companies were willing to provide the training. This system worked until about 1980, when U.S. industries began facing the reality that they were competing in price and quality with companies from throughout the world. Indirectly, our unskilled and semi-skilled workers were competing with workers in third-world countries who could learn their jobs relatively quickly, achieve a comparable or superior level of quality, and remain satisfied with wages that were five to ten times less than those of the American worker. The only way for American companies to remain competitive and stay within the United States was to make full use of information systems, sophisticated technology, and automation. This meant that fewer but higher-skilled workers would be needed (Hull, 1993).

The literature of the late 1980s and early 1990s clearly points to a need for schools to restructure the type of education students receive. According to Hull & Parnell (1991), if recent trends continue, up to three-quarters of new employees will have insufficient verbal and writing skills by the year 2000, while technology will demand more high skilled jobs than we can currently provide. There is a growing interdependence between education and economics that has made it more important than ever to recognize the strong link between what students are asked to learn and what they will do with the rest of their lives.

United States businesses and industries have a high stake in tomorrow's economy. Their economic success revolves around competitiveness and productivity--both of which depend on an adequately prepared labor force (Hull & Parnell, 1991). The literature review supported the notion that we (society) must prepare all students for a quality educational experience. One that goes beyond the abstract theories in the textbook or classroom to the practical uses and applications of education in careers and the workplace.

Governor Booth Gardner said in a speech to the Washington Association of Vocational Administrators conference in October, 1992:

> For 75 % of today's students, the ticket to success in the job market will be a world class education that integrates academic and vocational skills and knowledge, followed by postsecondary training or apprenticeship. We treat a four-year college degree as if it were the Holy Grail of education, even though we know that's an obsolete idea (Education Reform/School-to-Work Transition in Washington State, 1993, p. 3).

Tech Prep Defined

American education is under the greatest scrutiny in our history. If reports and studies alone could improve schools and colleges we would have achieved excellence in education a long time ago. What has been lacking in these reports is practical, down-to-earth advice on how to improve student learning for that group of ordinary students often called the *neglected majority* (Hull & Parnell, 1991; Parnell, 1985).

As described in the opening paragraphs of this research project, Tech Prep programs are an emerging educational reform movement that can help meet the needs of the neglected majority. In a concept paper prepared by the Organizational Affiliates of the National Tech Prep Network (1994) it was stated that, "In 1992, nearly one-half million young people were enrolled in Tech Prep/Associate Degree programs designed and developed through collaborative support and encouragement from communities, educators, and employers" (p. 1). The Tech Prep program integrates academic and occupational subjects, placing heavy emphasis on articulation from secondary to postsecondary education. The literature revealed a number of features that are considered the basic elements of a well-designed and developed program. The following is a list of those characteristics that appear to have common agreement among the Tech Prep authorities across the United States (Bottoms, 1992; Hull, 1993; Hull & Parnell, 1991; National Tech Prep Affiliates, 1994; Parnell, 1985).

- **Applied academics curricula** for the Tech Prep/Associate Degree program is a careful balance of head skill (academics) and hand skill (vocational-technical) subjects which runs parallel to the college prep/baccalaureate degree program. It presents the rigorous body of knowledge in a hands-on setting and relates it to personal or social situations relevant to the workplace. Applied academics in math, science, and communications form a solid foundation of knowledge, a core curriculum, which will help Tech Prep students understand complex technologies and new skill requirements in the work environment.
- **Local partnerships** of employers, labor representatives, parents, and community organizations have equal representation with secondary and postsecondary sectors on Tech Prep councils or steering committees during program planning and implementation. The partners work together to identify student outcomes required for future as well as current jobs; review curricula and course content for job relevance; and participate with educators to develop and provide work-based learning experiences such as shadowing, mentoring, internships, apprenticeships, etc.
- **Articulation** is a process for coordinating the linkage of two or more educational systems within a community to help students make a smooth transition from one level to another without experiencing delay, duplication of courses, or loss of credit.
- **Career exploration and counseling** involves a comprehensive, coordinated career counseling network of the facilities, programs, and skills of junior high/middle school, secondary, and postsecondary counseling professionals. To increase intelligent career choices, programs in career awareness, career exploration, and career/educational planning should begin at the elementary school level and continue throughout the college experience.
- **Associate and/or baccalaureate degree** fundamental courses prepare students thoroughly and proficiently for a variety of options after graduation from high school. Students may articulate into an associate degree program at a two-year college, seek a baccalaureate degree from a four-year college, or enter the workforce well prepared

for an entry-level position in a chosen field, retaining the option to reenter career training later.

School-to-Work Transitions

The United States is one of the few industrialized nations in the world that does not have a comprehensive school-to-work transition system. According to the Workforce Training and Education Coordinating Board (1994) there are a few isolated programs, but there is no systematic effort to take students from the world of school to the world of work in a manner that builds knowledge of an industry, increases level of skills, and deepens responsibility for product or service quality. In contrast, some of our primary international economic competitors like Japan and Germany provide professional education to non-college bound students. These countries, unlike the United States, have national policies to prepare youth for employment. Specific approaches vary by country, but typically schools and employers work together to facilitate youths' workforce entry. In particular, other nations commonly have apprenticeship programs that begin in secondary school and prepare students for a wide variety of occupations, white as well as blue-collar.

Judith A. Billings, Washington State Superintendent of Public Instruction, provided this information in a publication entitled Steps For A School-to-Work System (1994):

> Three-fourths of Washington's high school students enter the workforce without college degrees. However, most of our high school curriculum is designed almost entirely to meet the education needs of 'college-bound' students. While approximately 70% of the jobs of the future will not require a college degree, they will require a higher level of skills and technical knowledge. Our schools must do a better job of preparing this 'forgotten majority' to succeed in the workforce and to prosper economically in the 21st century. The Office of Superintendent of Public Instruction and the 1993 Legislature demonstrate a strong commitment to making improved school-to-work transitions a centerpiece of education reform efforts. Our current educational system can no longer meet the needs of our students who enter a world that is far different than the world in which the present system was designed. In recognition of this, Washington State has begun a systemic change through school-to-work transition [illegible]

School-to-Work Transition programs use meaningful work experience as both an integral part of the regular school curricula and as a key to planful career decision-making. According to several reports (American Vocational Association, 1994; Careerware News, 1994), School-to-Work legislation identifies three broad components.

- **Work-based learning** provides a planned program of job training or experiences, paid work experiences, workplace mentoring and instruction in general workplace competencies, and the chance to master a range of skills within an industry.
- **School-based learning** provides career exploration and counseling, instruction in a career major as identified in the student's plan, and a program of study that is based on high academic and skill standards. It may include postsecondary education as well as high school preparation.
- **Connecting** activities coordinate the involvement of employers, schools, and students. Such activities include: matching students with work-based learning opportunities; providing for the inservice of counselors, teachers, and mentors; helping with the placement of students in jobs, further education, and/or training; and follow-up on students' progress after graduation.

Today, the use of high schools to prepare youth for jobs is seldom questioned, but a shifting economy has changed the significance of this trend. Previously, the vocational movement offered students jobs after high school that often led to promising career possibilities within the company. Today, such opportunities are more limited, because a larger proportion of jobs ask for more formal education beyond high school, and an escalating number of youth lack the most basic academic skills.

In Washington State a Tech Prep program is one of several vehicles for implementing the school-to-work education reform initiative. Billing's (1994) report identified Tech Prep as one of the fastest growing curriculum innovations in the United States today. The Whatcom County Tech Prep Consortium is poised on the edge, ready to take the necessary steps to implement a full functioning Tech Prep program in the

local secondary and postsecondary schools. As identified earlier in the statement of need and review of literature, business-education partnerships will be a key element of any successful Tech Prep implementation plan.

Business-Education Partnership Models

Partnerships are voluntary, long-term relationships between the private sector and a school or school district. Partners form a mutually rewarding relationship with the purpose of improving some aspect of education.

By their very nature, business-education partnerships vary. There is no single master plan or grand scheme for business-education partnerships. They take place in different communities under unique circumstances, involving distinctive sets of key players. The literature indicates that partnerships vary tremendously across the country in their size, scope, and goals and that there are few limitations on their form and function.

Partnerships can be whatever the schools and businesses want them to be. An examination of the literature reveals that most partnerships generally fall into four categories. The categories have different titles according to the various organizations, but all can be grouped into the following classifications (classifications developed by the National Association of Partners in Education [NAPE] and the Society for Human Resource Management, and presented by Stone-Ewing at the School-To-Work Transitions/Tech Prep regional conference, 1994):

- **Helping hands relationships** are those in which an individual organization is paired with a school, school district, individual class, grade level, educators and/or parents to support, enrich and improve existing school activities. Through volunteer, adopt-a-school and business-education partnership programs, the school receives goods and services such as tutors, speakers, equipment and awards/incentives.
- **Programmatic initiatives** are those in which the individual organization cooperates with a school system to develop curriculum, career and mentor programs that target specific curriculum and/or student needs. Programmatic projects might

include the preparation of a quality workforce, improved SCANS skills and competencies, attendance, dropout prevention, technological skills improvement, etc. The programs are often supported by grants.

- **Alliances and compacts** are umbrella organizations that coordinate a range of private sector-public education initiatives for a broad spectrum of local, state or national partners. Activities associated with this group usually fall primarily into the programmatic and policy partnership levels. The group may serve as a clearinghouse and broker for information and technical assistance, provide a variety of direct experiences for students and educators (mentors, internships, apprenticeships), and administer broad-based cooperative and collaborative efforts.
- **Policy change organizations** are planned and implemented at business, education, and community organizations cooperate or collaborate to initiate bureaucratic rules and regulations, advocate proposed policy changes at the legislative level and lobby for changes in legislation and regulations.

During the past decade, business involvement with schools has increased, and as a result, progress has been made toward strengthening the connection between education and work (Mikulecky, 1990). Results of a Fortune magazine survey support this statement. Of the 305 companies responding to the survey, all but seven (two percent) reported they were doing something for education (Imel, 1992). As noted by Blount (1992), "The business community is already active in education, helping to create more than 140,000 business/school partnerships and spending $2.4 billion per year on educational programs, scholarships, and in-kind donations" (pp. 22-23).

ERIC (an educational research database) revealed over 2,000 references to business-education partnerships. Many of the background resources identified in this project's bibliography provided references to model partnership programs established throughout the United States. Program descriptions provided overviews of the project scope, identified key players, and explained how each partnership was established. Many

programs exemplary models of business-education partnerships. The following resources provided excellent descriptions of model projects/programs.

In Tech Prep/Associate Degree: A Win/Win Experience (Hull & Parnell, 1991), chapter six is devoted to five examples of working Tech Prep partnership models. Another source, a government report entitled Transition from School-to-Work (1993), identified four states that had formally adopted all of the components of a comprehensive school-to-work transition strategy. The report describes various model programs within each state. Portland, Oregon's Renaissance 2000 project was identified as exemplary. This model has been operating since 1989 and focuses on career education, career pathways, and articulation agreements with community and technical colleges. Lyman High School in Seminole County, Florida is another project mentioned in the report. It has an animation and television production course in partnership with Walt Disney World. In Rochester, New York a high school is partnered with Eastman Kodak. Levine and Trachtman's (1988) book is devoted to a series of case studies examining a wide variety of partnership models. An interesting example from this book is the Murray Bergtraum High School for Business Careers established in 1975 and still operating today. It is a magnet-type school that prepares students for both college and entry-level positions in the business community. Another report reviewed results of the Compact Project which was sponsored by the National Alliance of Business (1989). This project involved school-business partnership efforts at schools in twelve cities across the United States. The project had a three year time frame. Seattle Public Schools and Boeing were part of this project. Another author, Kranendonk (1992), describes IBM's partnership project. Over the last several years, IBM has developed more than 750 local partnerships with schools and participates in many programs that are national in scope. IBM committed more than $77 million in grants of money, equipment and technical support and more than 20,000 of IBM's United States employees are personally involved in efforts to improve education. Boston's Project Protech described in the Vocational Education Journal (March 1991), is designed to create formal pathways for students to enter professional careers in the health

care industry. Student trainees are employed full-time in a hospital setting and receive academic and vocational education in various classroom and work settings. Several other journals devoted entire issues to the topic of school-to-work and/or business-education partnerships (Educational Leadership, March 1992; Phi Delta Kappan, January 1993; The School Administrator, March 1992; Vocational Education Journal, March 1991, & January 1992).

Many communities are now faced with the challenge of building new models that will represent business-education partnerships. New partnership models are needed but, in too many communities, the old models are still in place (Hoyt, 1991). The models of the past cannot be expected to meet the educational and business changes that are rapidly taking place in today's society.

Elements of Successful Partnerships

Successful partnerships between business and education are being forged through an appreciation of the mutually beneficial results such partnerships can produce for students, schools, businesses, the community and the economy. The literature review revealed that effective partnerships share a number of common elements. The following characteristics were identified by many of the authors reviewed (Bragg & Layton, 1992; Danzberger & Usdan, 1984; Gray, 1984; Hoyt, 1991; Hull, 1992; Hull & Parnell, 1991; Illinois State Board of Education, 1991; Imel, 1992; Lacey & Kingsley, 1988; O'Connell, 1985; Zacchei & Mirman, 1986):

- **Leadership and commitment** are provided by top administrators such as superintendents, CEOs, school board members, principals, college presidents.
- **Communication** is open, honest, frequent and clear. Communication means more than keeping people informed through meetings, letters, newsletters, brochures, posters and news releases. It also means providing on-going opportunities for feedback.

- **Trust and respect** is an established part of the relationship. Key people working together towards common goals and resisting the tendency toward "turfism." Positive relationships between the private sector and educators can best be developed by taking advantage of the unique skills and knowledge that each has to offer. The sharing of expertise is the bedrock for effective relationships.
- **Formal, written agreements** and/or policy statements that are signed by all involved ensure a clear understanding between participants and smooth operations.
- **Long-term commitment** is required by all the partners. There are no "quick-fixes" in improving public education. Participants need to be willing to commit their time and energy to the partnership.
- **Recognition of shared educational** goals helps to overcome difficulties and facilitate cooperation. Well-formulated objectives give direction for planning and implementing activities; develop a plan of action that establishes what the partnership hopes to accomplish.
- **A systemwide manager** (coordinator, broker) who assumes overall administrative responsibility for the development, implementation and coordination of the program. One person in charge of the partnership efforts often spells the difference between an effective enterprise and a floundering exercise in amateurism.
- **Recognition** is considered a key element in keeping the partners involved. Create opportunities to privately and publicly acknowledge the value of each partner's contribution.
- **Collaborative, long-range planning** is essential. Organizations and institutions survive over the long haul only if their leaders understand the importance of systematic, long-range planning.
- **Extensive planning before involving the "big" partners**. Planners emphasize that there is usually only one chance to capture the interest of such influential (and always busy) people. Take time and plan well to make the most of that chance.

- **Allow time for members to establish themselves**, both personally and as a representative of their respective organization. Provide opportunities for the business partners to meet some of their own goals, as well as serving the needs of the school system.
- **Partners feel they "own" the project**, and this sense of ownership sustains them through the long, hard process of implementing projects and building partnerships.

Barriers to Successful Partnerships

Successful implementation of business-education partnerships requires employing the proper strategies and resources to ensure that the partnership functions effectively. The literature identifies a number of challenges to implementing a successful partnership. At the heart of many of the observations was the inevitable dilemma associated with resistance to change. This fear often leads to turf battles and difficulties in efforts at collaboration between traditionally separated groups (business and education). These barriers can, however, be seen in a more positive light. The conflicts may demonstrate that at least communication has begun and territories are no longer taken for granted (Bragg & Layton, 1992). The following challenges were most often mentioned in the literature (Bragg & Layton, 1992; Frazier, 1991; Hull & Parnell, 1991; Illinois State Board of Education, 1991; Lacey & Kingsley, 1988; Silverberg, 1993; State Higher Education Executive Officers, 1992):

- **Failure to plan.** Even among partnership projects that involved all key partners early, virtually all major problems and successes converged around the fundamental principles of sound planning. Most problems were, in fact, symptoms of poor planning. Business-education partnerships require meticulous planning. Planning takes a lot of up-front time and sometimes people are pressured to move quickly to the implementation stage.
- **Attitude problems.** In most partnership projects, participants have several attitude issues to overcome. The most common attitude problem is related to the traditional

prejudices among the worlds of education, business and government. Partners must be willing to learn about and adjust to the idiosyncrasies of each participant's environment. Participants (parents, counselors, teachers, students, business members) may view vocational-technical education programs as dumping grounds for students who cannot succeed in regular college-bound academic programs or for those who have behavior problems. If a Tech Prep partnership is viewed as a part of, or a continuation of vocational education, then this perspective can lead to some prejudging of the program quality.

- **Lack of commitment to the partnership effort.** Participants often underestimate the time needed to plan for projects and to continue planning throughout implementation. Partners should expect a long haul before their partnership regularly achieves the success envisioned by its creators.
- **Communication breakdown.** Lack of clear channels of communication and/or infrequent communication can lead to problems. All participants need to be kept aware of pertinent developments throughout the life of the program. Terminology is also an issue here. Partners need to be able to speak a common language; partners need to be familiar with the jargon of business and education.
- **Lack of resources (funds, time, people, materials).** Sometimes a small cache of private funds can offer partnership projects flexibility that can smooth the way for efficient programs and effective communication among partners. Private funds can help fill budgetary holes, leverage other dollars and permit project leaders to do things government funding will not cover.
- **Lack of clear implementation strategies and undefined purpose.** Partners need to jointly agree upon their projects mission, short and long-term goals, and implementation strategies. Without a clear mission and management structure, staff can find themselves regularly "putting out fires." Lack of clarity wastes partners valuable time.

- **Lack of ability to establish a partnership** - school officials/teachers frequently have few contacts in the business world, making it difficult to establish links with potential business partners.

The literature review revealed that creating and maintaining optimal conditions for collaboration, planning and implementation of effective programs requires determined leadership, combined resources, skilled management, and long-term commitment.

Benefits of Business-Education Partnerships

When partnerships are well planned and administered, everyone involved wins (Zacchei & Mirman, 1986). The fulfillment of organizational needs often proves to be the key reason institutions join in partnership efforts (Lacey & Kingsley, 1988). When leaders are able to clearly see that tangible benefits can be realized through energetic participation, they make collaboration a priority. Partners want to know that their talents are being used to benefit students and the education process. On the other hand, when benefits to organizations are vague, or not regularly reinforced, ownership is viewed as valueless and the end result is reluctant participation.

Cetron (1985) believes that in the future, business and education will be vital to each other's prosperity, as well as survival. He says:

> Partnerships between business and schools will be a pervasive part of the daily operations in most school districts by the 21st century. Many schools will depend on businesses for a large part of their funding, staff and equipment. In addition, many schools will use the workplace to train students in specific job skills, whether students intend to go to college or take on full-time jobs after they graduate. Businesses will depend on schools to update the training of their current workers and provide experienced high school graduates for future employment needs (p. 85).

The literature review revealed numerous benefits for being involved in business-education partnerships (Cetron, 1985; Education for Employment, 1988; Fitzgerald, 1993; Hull & Parnell, 1991; Lacey & Kingsley, 1988; MacDowell, 1989; O'Connell, 1985; Swift, McElhinney & Pershing, 1989; Zacchei & Mirman, 1986). The most common benefits mentioned can be grouped into several sub-categories.

- **For employers** there is the intrinsic reward of sharing their time and talent to enrich the curriculum and to help students see how what is learned in school relates to the real world. For employers who play an active role the program can pique students interests and motivate them through helping them become aware of career possibilities and expectations while also serving as positive career role models. Employers can gain an expanded pool of qualified job applicants. Partnerships can also lead to greater consumer understanding of a company's products, services, and policies.
- **For students** there is a greater opportunity to learn about careers, the economy, and real world applications of academic subjects. Taking students beyond the classroom to explore the world of work helps correct preconceived notions, erase misconceptions, and instill practical and realistic ideas about what is expected of them when they finish school. Students come to realize that there is much to learn beyond the covers of their textbooks and the walls of their classroom. Partnerships can also provide work experiences and help gain access to good job opportunities through internships, shadows, mentors, etc.
- **For schools**, partnerships bring new resources to enrich the curriculum and keep it up-to-date which can lead to a reduction in the dropout rate, improve attendance and increase enrollment. Schools receive a broader base of support from influential business leaders and the general public. The partnership provides natural channels to communicate to the business community the multiple goals and problems that schools face. Partnerships can lead to improvement in morale as teachers experience a closer relationship with the community and a new dimension of community support.

- **For the community** partnerships convey the idea that education is a joint responsibility and that citizens can play a role in upgrading the quality of the public schools.

The benefits of partnerships are practical in that they extend the ability of individual partners to achieve broad goals, and specific objectives that would be difficult to reach independently (Zacchei & Mirman, 1986).

As mentioned previously, there are few limitations on the form and function of business-education partnerships. The literature review revealed numerous ways that business organizations could be involved with education (Allen, 1991; Cetron, 1985; Education for Employment, 1988; Hull & Parnell, 1991; Lacey & Kingsley, 1988; Swift, McElhinney & Pershing, 1989; Zacchei & Mirman, 1986). Suggestions ranged from fund raising efforts (that support a variety of education endeavors), to human resource contributions (guest speakers, mentors, employee volunteers, executives-on-loan), equipment and materials contributions, and adopt-a-school programs. See appendix D for a more detailed list of partnership opportunities.

If there are doubts that business has anything to contribute to a partnership with a school, then consider this passage from the Institute for Educational Leadership as reported in Partnerships For the Future (1987):

> In a time of fiscal stringency and widespread criticism, schools are in search of allies. Educators realize more and more that business could be a source of strong civic support for public education, particularly at a time when they are increasingly hamstrung by the taxpayer revolt, public dismay at the quality of education, and declining enrollments in a fragile economy that limits the resources schools need to do their job. Business can be a source of moral and political support, financial support, and ideas for improving education (p. 6).

Summary

The education and private sectors have a shared responsibility for retooling the education system for the next century. Many of the reports on school reform have recommended that businesses and schools work together so that education can respond to economic changes. Policymakers and enlightened business leaders are urging the business community to play a unique role in supporting educational programs and building a public constituency for education. Establishing smooth and seamless connections between school and employment for all youth will create new demands and challenges, as well as benefits for schools, businesses, employee groups, and community organizations.

At their best, partnerships can serve as a way for schools to improve what they do, for businesses to make meaningful contributions to education, and for all to contribute directly to the quality of life in the community. As the literature review reinforced, a well-structured partnership provides a systematic and sustained approach to cooperative school improvement.

CHAPTER THREE
METHODOLOGY

This chapter presents the methodology used in the study. The method for identifying the study population, the data collection strategy and instrument, and the data analysis techniques are described. Letters of correspondence, the survey and interview instrument, and summarized data are presented in the appendix.

Sample Selection

Survey Respondents

The Washington State Tech Prep Director's Association was selected as the respondent population for the survey. Since the focus of this study is the eventual development of a business-education partnership model that supports Tech Prep programs in Whatcom County, the author selected an organization that has established business-education partnerships (consortia) throughout the state. There are currently 23 consortia directors in Washington State. Table I presents the list of directors who participated in the survey. The director's name, and consortium name are provided, as well as the number of secondary and postsecondary (community college, technical college, four year institution) schools that are represented in the consortium. The consortium name often represents a region or county in the state and the participating schools are considered "feeder" schools for that area and/or county.

Table I

Survey Respondents

Director	Consortium	No. of Secondary Schools	No. of Postsecondary Schools
Dr. Patricia Black	Everett Community College/ Sno-Isle Tech Prep	23	1
Robert Behrendt	Yakima Valley Tech Prep	12	2
Jerry Bennett	Thurston County Tech Prep	8	1
Marie Coon	Seattle Tech Prep	13	4
Marcia Henkle	North Central WA Tech Prep	9	1
Nancy Johnson	Clark County Tech Prep	12	1
Paul Parnell	Skagit-Island Tech Prep	4	1
Dr. Susan Quattrociocchi	Northeast Tech Prep	30	4
Ted Ravetz	Edmonds Tech Prep	5	1
Chris Strickwerda	Highline Tech Prep	10	2
Raymond Harry	Washington State Tech Prep (State Board of Community & Technical Colleges)	172	37

Interview Respondents

Nine National Tech Prep Demonstration Centers were selected by the United States Department of Education in 1992 to disseminate information on Tech Prep programs either being developed or already implemented and being improved upon. The sites represent a cross-section of regions from around the United States, as well as sites selected for their urban, rural and suburban characteristics. Each site has its own unique

set of priorities and ways of accomplishing the goals set by the grants. Two demonstration sites were selected for interview purposes.

Table II

Interview Respondents

Project Coordinator	Demonstration Site	Location
Marcia Dier	Mt. Hood Community College	Gresham, OR
Julie Vitalie	CORD (Center for Occupational Research & Development)	Waco, TX

Organized in 1986, the Mount Hood Regional Consortium District was selected as an interview site because of its proximity to Washington State and Whatcom County. Mount Hood has demonstrated success in its Consortium's ability to create partnerships that actively involve business people with educators in the identification and development of performance competencies for the classroom and the workplace. Their completed articulation agreements are in the areas the Whatcom County Tech Prep Consortium is just beginning to develop. Mount Hood has also had great success in the development of applied academic curricula.

The Center for Occupational Research and Development is located in Waco, Texas. CORD is a private, nonprofit research and development organization that is currently working in partnership with the nine demonstration sites to obtain data and disseminate information related to each sites projects. CORD is also considered to be one of the countries leading research authorities on School-to-Work/Tech Prep issues.

Dr. Dale Parnell, professor (Department of Education), Oregon State University, also agreed to a telephone interview. Dr. Parnell has served as the Oregon State Superintendent of Schools, Executive director of the American Association of Community Colleges and is the past President of Oregon State University where he is currently teaching. Dr. Parnell is considered to be the "founder" of the Tech Prep education reform effort currently evolving throughout the United States. As mentioned in the literature review, he coined the term *neglected majority* and identified the Tech Prep/Associate Degree program as a replacement for the general education program in secondary schools. Dr. Parnell's knowledge about the effectiveness of business-education partnerships related to Tech Prep programs is highly regarded by his contemporaries.

Instrument Selection and Design

Survey Instrument

The questions (Appendix A) were developed as a result of the literature review on business-education partnerships. Most of the available literature covered the breadth and depth of business-education partnerships in general, but few spoke specifically about partnerships that support Tech Prep programs. The survey questions are representative of the common topic areas discussed in the literature, but designed to elicit specific responses related to Tech Prep partnership programs. The questions were written to avoid yes and no responses. Since the respondents were all experienced directors of Tech Prep consortia the questions asked were intended to draw upon their experiences giving them an opportunity to share their knowledge about business-education partnerships related to Tech Prep programs and specifically, what is actually happening or being put into practice in regards to partnership efforts.

The survey instrument and resulting interview questions were reviewed by an experienced Tech Prep director and school district administrator. Both persons in the field test felt the questions were appropriate, although some minor changes were made to improve clarity and focus.

Interview Instrument

An interview was considered to be an effective data collection technique for a small sample, and the personal contact allows for a 100% response rate, immediate clarification, and the opportunity for getting at attitudes and opinions (Orlich, 1978). Orlich supports use of the telephone as reliable if the schedule (plan and alternatives) is non-biased, and if the respondent group is, for the most part, homogeneous.

An interview was determined to be the best strategy to gather data from the demonstration sites. Since most sites are quite a distance from Whatcom County, it was determined that direct telephone contact would help elicit immediate and more specific responses. It was felt that a project director could easily overlook a single, mailed survey request from a remote organization and simply choose not to respond.

As a way to gather similar data, the interview questions (Appendix B) were based on the survey questions. Six questions were selected from the survey to use in the interviews which would help support data collected from the surveys. The same questions were asked in each interview situation.

Data Collection Strategy

Survey Administration

The survey was distributed to all Washington State Tech Prep Directors attending the April 20, 1994 meeting at the State Tech Prep/School-to-Work Transitions conference (SeaTac, WA). A brief overview about the purpose of the survey was given to all participants along with a cover letter providing more specific details. Time was given to

review the survey and ask questions. Each director was asked to participate, but it was left open as voluntary. If a director chose to participate in the survey, he/she was asked to provide their name, consortium represented and phone number on a separate sign-in page. The signature provided verification of receipt of the survey, a willingness to participate and an eventual way to follow-up on unreturned surveys. Each participant also received a stamped, self-addressed envelope for easier return of the survey. At the conclusion of the meeting, cover letters and surveys had been distributed to 18 directors (out of 23 possible) and four state agency directors that are affiliated with Tech Prep programs. It was requested that the surveys be returned by May 10, providing three weeks for response time. Between April 20 and May 24 only two surveys had been returned. On May 25 a follow-up memorandum (Appendix A) was sent to all directors requesting that the survey be completed and returned by June 6. As a result of the memorandum the author received eight requests for copies of the survey (some had been "misplaced"). Between May 25 and June 6, six more surveys were received. A final request for the return of surveys was given to those attending the June 16 director's meeting. As of June 30, 1994, a total of 11 usable surveys had been returned.

Interview Administration

For each demonstration site selected for a telephone interview the contact person was determined to be the project director identified in the published listing, Tech Prep: National Model Sites (1993). The purpose of the call was explained to verify the appropriateness of the contact person, which sometimes led to a phone transfer. Once the person in charge of, or most knowledgeable about business-education partnerships was reached, he or she was told that the interview was part of a graduate research project for Western Washington University which proposed to help develop a partnership program for the Whatcom County Tech Prep Consortium. Each respondent was asked if a phone interview could be arranged at a convenient time for their schedule, with interview questions mailed to them in advance. Each respondent declined a prearranged interview in

favor of one done immediately. Each person indicated that "now is a convenient time." Three interviews were completed by telephone on June 6, 1994.

Data Analysis

The survey and interview data was compiled, analyzed and presented as descriptive research. Comparisons between the information presented in the review of literature, and the original research questions were made with the survey/interview respondent's information. Simple comparisons were obtained and the data was reported as raw numbers.

The responses received from the Washington State Tech Prep Directors reflected a microcosm of the larger Tech Prep director's association across the United States. Although the survey sample population was small (eleven directors), almost 50% of existing Washington State directors participated in the survey.

Survey and interview results are presented in Chapter Four. Even though respondents were identified in this chapter, respondent specific statements were kept anonymous in Chapter Four. Specific findings and conclusions were generated and are presented in Chapter Five, along with implications and recommendations for future research.

CHAPTER FOUR
RESULTS

This chapter presents and generalizes the survey and interview data gathered for this project. In reviewing the data, responses were analyzed for commonalties and conceptual similarities according to the original research questions presented in this document. Particular attention was given to trends, similarities and common themes about partnership efforts.

Eleven of the 22 surveys were returned for a 50% response rate. Ten Tech Prep directors (out of 18 sampled; 55.5%) and one Washington State agency director (out of 4 sampled; 25%) responded to the survey. Of the respondents, two consortia directors manage projects that involve 24 or more education institutions (Everett at 24 and Northeast at 34). Five directors manage projects with 10 or more schools and three projects involve fewer than 10 schools. The assistant director of the State Board of Community and Technical Colleges is responsible for all Tech Prep projects funded through the agency (a total of 209 secondary and postsecondary schools). The surveys returned represent a cross-section of geographical areas in Washington State.

There were three interviews conducted and this chapter summarizes the results from all three. Two interviews were with individuals from National Demonstration Sites (Oregon and Texas) and one telephone interview was held with a noted authority on Tech Prep programs (currently residing in Oregon). The names of survey and interview respondents can be found in Chapter Three (Tables I and II), but respondent specific statements are anonymous in this chapter. A summary of survey and interview responses can be found in Appendix C.

Responses from the surveys and interviews were summarized and analyzed for similarities and/or strong differences in thoughts, attitudes, perceptions, and conceptual similarities about business-education partnerships. Because the survey questions were

subjective and allowed for open-ended responses, there were a range of answers. In analyzing the data, the responses were grouped by common topic areas to allow for a more accurate comparison of results. Simple comparisons were obtained and reported as raw numbers. The following data is a report of the results, presented in the survey question format.

Survey and Interview Results

Question One: Based on your experiences, why do you feel business-education partnerships are a critical element for a successful Tech Prep program?

The most common response among the directors (73%) was related to the fact that business organizations are the ultimate recipient of education's product (students). Business people know what skills are needed in the employee of the future. It was emphasized that education and economic development cannot be separated. One director said that the "Tech Prep initiative is rooted in research which indicates that entry level workers are inadequately educated for the world of work. The inadequacy can be explained in terms of a gap between educators' understanding of the new world of work and their part in it. Business/industry partners can help interpret what is needed." Another common theme in the responses dealt with the relationship between the curriculum and the real world. As one respondent said, "educators need to understand how academic and technical skills are being applied in the workplace to help update and validate curricula." Educators can no longer ignore the reality of the workplace. Through partnership efforts, business can help ensure that the curriculum is relevant and meaningful for students. Business can help provide opportunities to get students out of the classroom and into the workplace. Business becomes a source of work-based learning opportunities (mentors, shadows, internships) for students. In some situations, business can help provide immediate job opportunities for students who choose not to pursue baccalaureate degrees.

One director added a cautionary note: "employers must be happy with the product (student) of the Tech Prep programs. If students are hired and prove unable to demonstrate a quality (enhanced skill) employee, the program will fail (another trendy education ploy). Hence, business must be supportive and involved in the decision making about curriculum and expectations (outcomes)."

Question Two: What have you found (or believe) to be the most effective way(s) to bring business and education people together? What method/process have you used or tried?

There did not appear to be consistent agreement among the directors or those interviewed as to the "most effective" ways to bring partners together. In fact, one respondent provided a viewpoint similar to that found in the literature: "I don't think there is a 'most effective' way, or a special method or process [to bring business and education people together] other than talking to business people, inviting them to participate and making it worth their time to participate."

As far as making the contacts are concerned, five respondents (36%) specifically identified already organized groups as a source of potential business contacts. Organizations such as, occupational advisory committees, the Economic Development Council, Chamber of Commerce and labor unions were mentioned.

In identifying *how* to make the contacts two respondents mentioned face-to-face contact as an important factor. Another director used the term "invite" as a way to describe how to get business people involved in a partnership. One of the interviewees said that "business people are more likely to be involved when invited by other business people (peer-to-peer)." Respondents also mentioned keeping meetings to a minimum, keeping them concise, and varying the meeting location as effective involvement techniques.

Several respondents suggested "activities" or joint projects as a way to bring partners together. There were a variety of responses in this category: businesses providing opportunities for job shadows by faculty members; business people writing

job/task descriptions that teachers can use in the classroom; establishing work-related educational opportunities for students; business validating course competencies and performance standards, and reviewing curriculum for relevancy. As one respondent said, "it is most effective to establish common goals that are obtainable over short periods of time in order to build the relationship [and experience success]." Another respondent encouraged to "let them (business) design their own role--provide them with examples, suggest ways to help and then let them decide how they can best contribute." One interviewee suggested, "identify a way(s) to actively involve the business partners; use their expertise to your advantage."

Another cautionary note was added by one interviewee: "avoid asking for money and/or equipment--it seems to be the only reason that often gets used to involve business people in a partnership."

Question Three: How have you determined *who* to involve in the partnership?

Two directors specifically identified the Tech Prep RFP (request for proposal) as establishing the guidelines for who to involve in the partnership. If a project is funded through the grant award process, then certain membership criteria must be met to maintain the funding. Six directors (55%) mentioned program goals, consortium schools, career clusters, and occupational areas that the educational institutions are training for as potential sources for partnership opportunities. All of these areas are related to the RFP guidelines.

As supported in the literature, three respondents (21%) identified "key leaders in business and labor" as effective partners. One respondent used the term "credible" to describe this person--someone who is respected by his/her peers and is a leader within the business community. It is important to actively involve the leadership, the decision makers of a business organization. Chambers of Commerce and Private Industry Councils can be influential and useful organizations to work with in a community. As one respondent

suggested, it is best to work with business groups that are already organized rather than trying to reinvent the wheel.

Another factor identified in the literature and mentioned by a respondent was making sure that there was membership representation of a cross-section of the community being served by the partnership. As suggested by the respondent, selecting people from big, medium, and small business organizations, labor groups, teachers, students, parents and government ensures involvement and support from key stakeholder groups. When people feel they've had an opportunity to be represented, a voice in the decisions, they are more likely to support what they have helped create.

Question Four: What have you found (or believe) to be the most effective organizational structure to use in building a model business-education partnership? (a structure that ensures participation by all members)

Respondents described techniques they were using in their organization to encourage partnerships, but there was not common agreement among them as to the "most effective" structure. However, the directors did reinforce particular strategies mentioned in the literature, such as: providing lots of clear information about the program; use of subcommittee structures to keep people involved; involving people who really want to be involved; establishing a clear mission, goals, by-laws and clear expectations for all partners.

One director did point out that streamlining the partnership organization would help create a more effective and efficient structure. The respondent emphasized that many times the same people are involved in committees at the colleges, the individual high schools and other community related business-education committees. As the director stated: "With School-to-Work, Tech Prep, Workforce Training, local advisory committees to educational programs in the high schools and colleges, there is duplication of effort and membership." The effort today is on networking and sharing resources to minimize "burn-out" by both school and business personnel.

Four directors attached a copy of their Tech Prep consortium's organizational chart diagramming the various committee structures they were currently using. Three directors included their consortium's vision, mission and goal statements. Each consortium's statements reflected the uniqueness of their organization. The common thread that tied the organizations together, was the fact that each group had written statements reflecting the organizations values and beliefs and that the statements all identified issues such as lifelong learning, partnership efforts, a smooth transition from secondary to postsecondary education opportunities and transitions from school-to-work. Each organizational chart identified the leadership as a "Steering Committee" or "Executive Board" with a membership representing both business and education (the partnership). The leadership team was then sub-divided into smaller committees or work groups. Three of the four directors indicated that they [leadership team] selected a business person and an education person to co-chair each committee. Committee membership was comprised of members from the leadership team and other interested persons from the business and education communities. Names of the various committees differed among the Tech Prep consortia, but the theme areas were consistent: curriculum development, assessment, work-based learning, marketing, student development, staff development, career education, guidance and counseling.

Question Five: What techniques have you used to (or believe will) *sustain* involvement by the business and education members?

As with previous questions there were a variety of responses. Five respondents (36%) identified "structural" techniques that keep the organization (partnership) running smoothly: limit the number of meetings, have purposeful agendas, establish clear goals and objectives, and keep the membership informed (minutes from meetings, newsletters and quarterly reports were suggested). Along the same line, active/participatory involvement was also recommended. A key structural component is the smooth operation of the partnership and the project. An interviewee suggested that "somebody has to be 'in

charge' of the organization/partnership to keep everyone involved and on task, to keep everyone informed; to keep meetings focused, organized, and the operation running smoothly. As long as there is someone there to keep the program operating and keep the contacts going, the business groups will stay involved."

Five respondents (36%) spoke about the "interpersonal" skills that help sustain partner involvement. They suggested asking for their (business) opinions, seeking advice and then really listening to the ideas presented, and as often as possible, incorporating their suggestions into the project(s). As one interviewee commented, "if we are going to ask for businesses help in this project, then we need to be prepared to accept their help." Along the lines of communication, two respondents suggested that education needs to learn how to speak the language of business. Both education and business need lessons in each others "operating" languages. If the two groups are going to work together in partnership, they need to be able to talk together, listen to each other and understand what each is saying. One director added, that the organization "shouldn't spend all its time as 'education' telling them [business] what education is doing." Another director used the term "ownership" to describe the relationship. Giving partners specific responsibilities, and "making them feel proud of their involvement." One respondent described the membership as needing to be "believers"--believers in the Tech Prep program and the partnership effort. Another respondent mentioned that educators will have to make their institutions friendly to business at all levels. Some schools have had very little experience with business and/or partnership efforts and will need to learn the skills of facilitation and consensus building.

The third area most often mentioned by the directors and interviewees (seven references) dealt with "results." The respondents suggested producing programs that work, making progress toward a goal, keeping focused on a task (competency identification), and providing positive experiences as effective ways to sustain the partners involvement and motivation. There was emphasis on clear identification of a reason or purpose to be involved in the partnership. One respondent suggested letting business

decide how they want to be involved, rather than telling them what to do. This simple suggestion can provide more meaningful involvement for all partners. Two directors provided cautionary statements. Both of their comments were supported in the literature. One director said, "...it is unrealistic to expect that business will sustain a relationship that doesn't pay off for them." The second director added, "education also needs to be willing to change more rapidly or business will get impatient and leave." Another director mentioned, producing better technically prepared students (a more qualified employee) as being the most effective and sustainable outcome of the partnership and the project. If business feels they are making a difference in the quality of education for students and their eventual employees, they are more likely to stay involved in the project.

Question Six: What do you believe are 3 of the key characteristics of a *successful* business-education partnership?

Once again, a variety of answers revealed the diversity of the directors as well as the factors that they felt led to their own partnerships level of success. However, some common themes of characteristics were evident.

Productive meetings and productive results were specifically mentioned by two directors, but nine other respondents (64%) identified factors that are an integral part of productive meetings. All of the identified factors are supported in the literature: a clear vision of purpose; specific goals, objectives identified and agreed to; clear communication; team work, cooperation, and respect among partners; a sense of ownership in the organization and project. The respondents also identified the need for a coordinator "to make it all happen"; someone to work between the consortium (education) and businesses to keep people actively involved.

Time (providing it and worth of) was also an identified factor by two respondents, but was implied by several others. Being able to make a commitment to committee meetings takes time away from the job (the employer and the employee) and other related activities. It takes time to negotiate educational reform (Tech Prep) and develop new

programs--the time it takes for committees to meet, to problem solve and implement change. Partners will need to accept the reality of the amount of time that needs to be invested in a partnership effort to make it successful.

Leadership was also identified as a key factor of successful partnerships. In this case (Tech Prep) leadership was mentioned as needing to come from both the State and local (school district) levels. One director said that leadership and commitment from the State level was necessary to get business partners involved in the project. Another director said that school districts needed leadership from superintendents, principals, and vocational directors. One respondent cautioned to make sure that you have the support of education before contacting business people to be a part of a partnership. A third director combined business and education leadership working together to pursue common goals. In any case, the directors and the review of literature both support strong leadership as a key factor of successful partnership efforts.

Active participation was again identified by several respondents. Providing specific tasks for members to work on is important, but as another director added, "the organization has to be able to accomplish something the members feel is of value." There needs to be a positive, constructive, useful result. 29% of the respondents provided examples of action-oriented, "useful" outcomes: identification of functional skills (performance competencies) for various occupational areas; helping update programs and evaluation techniques; promoting career awareness and exploration activities; providing work site opportunities (shadows, internships, apprenticeships, etc.); and, businesses actually hiring more graduates of community college and Tech Prep programs.

Interestingly enough, only one director identified money as a success factor. As mentioned in the literature, money may end up as a "by-product" of partnership efforts, but is not considered to be a success factor in developing or maintaining business-education partnerships. In fact, one interviewee cautioned (Question Two) against asking for money and/or equipment as a way to support a partnership effort. If money is what you are after, the partnership probably won't get off the ground.

<u>Question Seven:</u> What do you believe are 3 of the key *barriers* to implementing a successful business-education partnership?

Again, there were a variety of responses but many that centered around similar themes or issues. Seven references were made to the lack of organizational goals, objectives and clear purpose. As one director said, "goals need to be established for people to feel their time has been spent productively." Around the theme of meetings, the issue of not having a clear agenda and mutually agreeable meeting time can create a potential barrier to quality communication. Two other respondents identified a lack of infrastructure or support network as a barrier to partnership efforts. The literature does support some type of system to maintain the relationship.

Interpersonal issues were again mentioned as barrier factors. Two directors noted that lack of trust or mistrust between partners can lead to communication problems. One director mentioned education partners not really wanting business partners involved in the project [business shouldn't be telling education what to teach]. Another referred to the same issue as lack of respect for the business perspective. One director labeled it "education fear and/or entrenchment." Fears could be related to education's traditions--this is the way we have always done it. Another director referred to the fear as "turf" issues. The literature supports evidence of both turf and tradition factors. The literature also emphasized that the historical lack of positive communication and long-term working relationships between business and education have led to the lack of trust and turf related problems. Another related factor raised by an interviewee, was that "they (business) get excited by the project, come to the committee meetings and then get stuck in committee conflicts, 'political' issues, and turf wars. If this happens, business will stop coming."

Time appeared to be another barrier factor among the directors. The issue of time was identified by eight different respondents (57%). Most often mentioned was the lack of time or the commitment to make time to participate in the partnership. Two directors said that some businesses are unwilling or unable to give employees release time to serve

on committees or volunteer at schools. Small businesses often cannot afford time away from their place of business and/or they can't provide the back-up staff to give other employees the time off. Another director identified the factor of too many time commitments to other organizations as a barrier to business/labor involvement in Tech Prep (emphasizing the need to streamline or consolidate various committee structures). One interviewee wanted to remind other directors, that "business is out to do business (their livelihood), and they don't always have time to come to meetings and participate in a variety of activities."

Once again, a cautionary reminder was provided by two directors. One pointed out the "cultural" differences related to time--educators like to process and business wants action. Too much talk, and too much process can lead to inaction and negative results. The other director added this thought, "business finds education slow to react, cumbersome and eventually they become quite impatient." Partners need to be aware of each others "working" styles and "customer" expectations.

The lack of active involvement and unwilling participation by partners were identified as potential barriers. As one director said, it can't be "superficial, community relations involvement by employers." There has to be commitment to the partnership effort and to the project itself. One director summarized: "results must occur for there to be a commitment to a long-standing partnership. People must believe their commitment is making a difference in enhancing the educational process."

<u>Question Eight:</u> Were there any information resources that you found most valuable when developing your business-education partnerships? Please provide the names/titles of several you found most helpful.

None of the directors found a common source that they identified as "most valuable." There were a range of responses. Three directors provided their opinions about setting up a partnership "by the book": "we made it up as we went along--we knew what we wanted to happen and what we didn't want to happen and figured out what to

do;" and, "you have to struggle and create;" and finally, "all [resources] are too 'idealistic'; each local consortium will have to hammer out local agreements."

Other resources mentioned by respondents, such as book titles, information clearinghouses and peoples names can be found in Appendix C.

Summary

Chapter Four summarized and generalized the survey and interview data. A variety of responses revealed diversity among the directors as well as the partnership efforts they have worked to create. Even with the diversity there were trends, similarities, and common themes about partnership efforts that could be identified. Specific findings and conclusions that were generated from the review of literature, surveys and interviews are presented in Chapter Five, along with recommendations for future research.

CHAPTER FIVE
CONCLUSIONS AND RECOMMENDATIONS

This chapter presents conclusions and recommendations for future research based on the findings identified in Chapter Two and Chapter Four. A model for developing successful business-education partnerships is presented, along with a discussion of the human interrelationship factors that affect partnerships, and methods to sustain involvement in partnerships. The chapter concludes with a series of four recommendations for continued research.

The Whatcom County Tech Prep Consortium had a need to develop a sustained business-education partnership that would support its efforts in educational reform, specifically Tech Prep/School-to-Work Transitions. This research project was designed to develop a Tech Prep partnership model that could be used by the local consortium or any other consortia seeking to establish successful collaborative efforts between education and business. The five original research questions guided the search for information about partnership programs that would help support the development of a successful partnership effort in Whatcom County.

The breadth and depth of information about business-education partnerships was expansive. There were many reported case studies of successful and not so successful partnerships, but the literature that reported on Tech Prep-related partnerships was limited. And, since Tech Prep programs are fairly new to Washington State (three years) there were few "local" model programs to emulate. The survey data obtained from the Washington State Tech Prep directors helped provide insight into the partnership strategies they were using in developing their own Tech Prep consortia.

The original research questions and resulting survey/interview questions helped focus the search for those common qualities and characteristics, organizational structures, and implementation strategies that have been used to develop other successful business-

education partnership efforts. As a result of the accumulated data the following components and implementation strategies were identified as essential for creating a successful business-education partnership.

A Model for Developing a Successful Partnership

Ten components were identified as representative of the qualities and characteristics contained in a successful business-education partnership. Table III lists the components and a follow-up narrative provides explanation and suggested implementation strategies for each one. The components are listed by number, suggesting a planning sequence but not necessarily a priority listing.

Table III

Components of Successful Business-Education Partnerships

1. Awareness
2. Coordination
3. Recruiting
4. Planning
5. Relationship
6. Motivation
7. Commitment
8. Retention
9. Recognition
10. Evaluation

1. **Awareness.** Awareness is the key to the formation of a partnership. The purpose of the awareness effort is to stimulate interest in partnership involvement. Schools have many needs, and community partners have much to offer. A partnership develops when perceived needs and potential resources are matched.

Suggested Strategies

- Identify a broad target audience that represents the interests of the community.
- Develop a public relations strategy.
- Inform key decision-makers and others within the school system, corporations, organizations, and community about what partnerships for education (Tech Prep) are all about and why the community should become involved.

2. Coordination. Coordination of a partnership through the efforts of a systemwide manager can often spell the difference between an effective enterprise and a floundering exercise in amateurism. Lacey & Kingsley (1988) noted in their research of partnership projects that "every successful partnership was launched, spurred or negotiated by a 'broker" (p. 5). The broker (either a single person or small group) was identified as an "intermediary whose vision, influence, and tenacity made something happen" (p. 5). The coordinator assumes overall administrative responsibility for the development, implementation and coordination of the partnership program.

Since business-education partnerships are unfamiliar to most participants, the specialized institutions involved must learn to adjust to ways of working that may be generally foreign to their own organizational cultures and structures. The research showed that the best partnership coordinators were "bilingual;" that is, they could move comfortably in several contexts, acting as trusted translators and diplomats. They would forego personal credit in favor of instilling a sense of ownership of the project among potential partnership leaders.

Through the experiences of other partnership projects it has been shown that a partnership coordinator/director should possess as many of the following strengths as possible (adapted from Lacey and Kingsley, 1988).

Suggested Strategies

- A commitment to the partnership concept.
- A vision of how the systems could improve.
- Credibility among potential partners in business, education, and government, with the ability to move in all three sectors and "speak" all three languages.
- Ability to make contacts throughout the community.
- Management and organizational skills.
- Experience with related efforts, or solid knowledge of how they work.
- Stamina to maintain effort over time as a referee, cheerleader, and coach.
- Understanding of the various "work-related" systems, education systems, and government operations.

3. Recruiting. Partnerships need a strong recruitment component to ensure adequate volunteers for partnership activities. In the beginning, most partnerships develop through the initiative of one person. It is vital that the initiator begin forming a personal relationship with his or her potential partnership counterpart. Building the trust and understanding between the initiators is key to the eventual long-term success of the partnership.

As the partnership develops, the need for involvement of top-level management increases. Both the review of literature and survey/interview results reinforced that the most effective and lasting partnerships begin with the systematic involvement of influential (executive level) school, business, and community representatives. A partnership needs a core group of high-level leaders who strongly endorse the mission of the joint venture and agree to share risks and benefits equally. The literature revealed that partnership projects experiencing the greatest problems failed to secure strong support from all key players

during their earliest days (Lacey & Kingsley, 1988). Leadership needs to make a philosophical commitment to the project, as well as that of resources and time. Without strong leadership at the *top*, "subordinate" involvement will be limited at best.

Recognizing that no program can operate successfully if it relies solely upon upper echelon players, the best projects seek out energetic, committed players from every level of their respective organization.

In many partnership projects the early involvement of principals has proven especially important. It is the principal who will ensure implementation of the partnership project within the building and who will recruit other volunteers from among his/her staff to be a part of the project.

Suggested Strategies

- Use your strongest and/or most enthusiastic partner to build support from other bases.
- Designate a key contact person from each partner organization. This person will assume the coordinator responsibilities within that organization and will spend a substantial amount of time developing and maintaining the partnership within their institution.
- Recruit interested representatives from the schools and business organizations to become part of a "building team." The organizations contact person becomes the team leader. The team is responsible for implementing the project within the organization. Partnership planning that relies on many constituents to establish goals and priorities increases the likelihood of success and support.
- Include people on the planning team and the building team who will be affected by the partnership activities--teachers, students, parents, etc.
- Clearly define the roles of team members; identify the expectations. Always keep the project goal in mind.
- Involve people early on in developing the partnership. The earlier their involvement the greater their energy, enthusiasm, and commitment will be. A dedicated team is crucial for accomplishing ambitious goals.

4. Planning. It is important to develop a planning strategy. Early planning is more than the initial step in the partnership process. It is the foundation of a successful interrelationship based on mutual understanding of complimentary goals and objectives. Planning *cannot* be rushed. A major program can take months to develop and it takes a solid relationship to execute. Lack of sufficient planning and clarity of ideas can end up wasting partners valuable time. Too often, in a rush to produce a visible product, program planners failed to realize that by devoting minimal time to up-front planning, they were committing themselves to spend inordinate amounts of time later coping with problems that could have been avoided. Anticipating possible problems in advance helps in designing a partnership to avoid them. Solving problems later is much more complex when they must be tackled within the constraints, structures, systems, and bureaucracy of an operating program.

Suggested Strategies

- Identify a planning team. A planning approach used successfully by many partnership programs is to form a partnership planning team (coordinating council, steering committee, task force). A steering committee acts like an executive committee. It meets often and runs the day-to-day business of the program. The planning team develops the operational plans, defines roles and responsibilities, schedules and assigns the work. Some of the people involved on the team will have already been part of the preliminary discussions, and others will have to be recruited. It is not a good idea to create a program without direct involvement from those who must implement it.
- Investigate other models. Before designing their own partnership program, partners should investigate a number of model programs they might adopt or adapt to their particular needs and goals. Other models can provide valuable guidance as partners work together to design new partnerships or expand already existing ones.

- Establish an organizational structure. Most partnership models use similar organizational structures, but change the program focus to suit the needs of the particular organization. Before the first meeting prepare a suggested organizational structure so that the business of planning can be conducted in a structured and orderly way. Normally this requires a committee structure similar to most other organizations: steering committee (planning), chairperson, project manager/coordinator, secretary, treasurer (if funds to manage), and various project or "work" committees.
- Identify administrative procedures. Some procedures are needed to safeguard partnership programs. These include such matters as maintaining information files, assigning work space, preparing agendas and minutes, coordinating activities, identifying decision-making channels and chains of command.
- Identify various roles and responsibilities. Successful partnerships spell out in writing the roles and responsibilities for each group of people involved in the program--partnership coordinators, school district staff, principals, teachers, parents, business and community volunteers. Role descriptions should be developed with the consensus of the groups involved in the partnership so that each will be aware of the expectations.
- Complete a needs assessment. In order to determine what direction a partnership should take, it is important to identify the needs, interests, and resources of the schools and their current or potential partners. It is the school's responsibility to identify the specific needs or forms of assistance that will benefit the partner organization; whereas, it is the business partner's responsibility to determine the needs that can be served. Where a project director or planning group identified local needs *before* assembling potential partners, planning could proceed rapidly because the group understood what needs its partnership activities could address successfully. Surveys have been used by many partnership groups as a successful data gathering technique to assess needs.

- Establish a mission statement. Don't try to write another preamble to the Constitution. The purpose of the mission statement is to provide in writing the target toward which all partnership activities will be directed. Try to define in the simplest of terms the reason why the partnership exists. Avoid listing all the things you want to accomplish (Adams & Snodgrass, 1990).
- Identify goals. Begin by establishing both short and long-range goals that the partnership wants to accomplish in support of the mission statement. Setting action-oriented goals early in the partnership's development is essential. Without goals it is impossible to develop a plan or measure your effectiveness. Goals should be general enough to become the umbrella for more specific objectives, yet focused and measurable enough so partners clearly understand the direction in which the partnership will proceed and effectiveness of the partnership can be measured. Always choose goals realistically and do a few things well.
- Develop an action plan. The action plan should strive to capture the intent, spirit, and desired outcomes of all partners. Each partnership plan is unique and should state mutually agreed upon goals, list specific activities and on-going programs, and include steps for implementing each activity identifying the targets within a particular time period. It is important that the planning team remain flexible enough to respond to unexpected changes and opportunities.
- Establish a timeline. Partners must expect a long haul before their partnership regularly achieves, with minimal headaches, the successes envisioned by its creators. Underestimating the time needed to plan for projects, and to continue planning throughout implementation has caused problems for many partnership projects.
- Develop communication strategies. Proper and frequent communication is essential to any successful relationship, and this is especially true of business-education partnerships. It is important to establish a process in which all team members can discuss how things are going. The partnership should meet regularly to review progress, resolve conflicts as they arise, and make changes as necessary. Be sure to

share evolving plans with management, both at the school and in the company. Make use of indirect methods of communication, such as notes, phone calls, written updates, newsletters, minutes from meetings and quarterly reports.

5. Relationship. Establish a strong working relationship between the business and school partners early on. The formation of this relationship is fundamental to eventual success of the project, and the elimination of potential turf wars, so conscious attention should be paid to its ongoing development. The partnership may initially function with some awkwardness, but the more that can be done to clarify roles and reduce interpersonal uneasiness, the sooner the team will start to function effectively. It takes time for partners to develop trust and respect for each other, but the two qualities are absolutely essential to the establishment of a solid working relationship. Work towards long-term relationships, not short-term activities. Go slow, be patient, understand the two different "cultures" (business and education) you are partnering.

Suggested Strategies

- Provide an orientation--helps the various members become more familiar with each others programs.
- Spend time up front getting to know each other. Discuss special attributes of the school(s), the business(Es). Talk about education reform--attitudes, beliefs, the future.
- Build in some time to socialize during the first few meetings as a way to reduce personal barriers.
- Discuss your expectations and limitations in regards to program mission and goals. Identify the expected outcomes/results. Key people working together towards common goals helps avoid turfism.
- Become familiar with each others working jargon as a way to reduce miscommunication problems.
- Provide meeting opportunities to connect teachers, parents, students and business people together.

- Provide short-term, focused, practical, specific instruction to enable both business and education partners to carry out partnership responsibilities.
- Conduct meetings at different locations as a way to build a shared experience base that can help strengthen the team.
- Ask representatives from various organizations to share responsibilities for certain tasks. This helps nurture personal relationships and build "team spirit" (example: a business and education person co-chairing a committee).
- Ask representatives to share their expertise with other members. Take advantage of the unique skills and knowledge that each has to offer.

6. Motivation. An extensive and significant business-education partnership program does not occur automatically. Several partnership directors mentioned actively recruiting (one-on-one, direct contact, face-to-face) and convincing people that they should be a part of the partnership effort as an effective motivational technique. In recruiting potential partners, it is helpful to understand some of the factors that are most often mentioned as reasons for involvement in volunteer or partnership programs. The following factors often motivate people to say *yes* when they are asked to help.

Suggested Strategies

- Concern for youth. Whether a parent or not, most people express a concern about the young adults who will be tomorrow's workers, leaders, and parents. Motivating students to stay in school, get a solid education, become lifelong learners and productive citizens are appealing reasons to become involved in a partnership project.
- Belief in vocational/technical preparation. As identified in the literature review, many students, parents and employers are beginning to realize that not everyone wants or needs a four-year college education, but we do need students who have stronger academic skills and an increased level of technical skill ability. Employers are anxious to be a part of improving the employment skills of students who are about to enter the workforce.

- Personal satisfaction. Many people derive a great deal of personal pride and satisfaction from being able to help others.
- Professional satisfaction. This factor serves well to help recruit the expert craftsperson, the respected business leader, or government agency worker who possesses skills or knowledge needed by the partnership effort.
- Business/employer expectations. Many employers actively encourage their employees at all levels to become involved in community affairs, including education. There is often a desire to improve or maintain a corporate image (Zacchei & Mirman, 1986). This may be especially true for smaller, or less established companies, where good publicity can contribute to the company's short-term goals of increased recognition.
- Societal responsibility. Social responsibility and community support is a major impetus for business involvement in education (Zacchei & Mirman, 1986). There is a sense of responsibility to do their part in making the community a better place to live.
- Benefits to employer. The fulfillment of organizational needs has proven to be the key reason institutions join in partnership efforts. When leaders could see that tangible benefits could be realized through their participation, they made collaboration a priority.

The particular motives of any business for involvement in education must be compatible with the goals of the partnership. As mentioned in the literature review, potential partners need to explore each other's attitudes towards business involvement in education in order to reduce the chances of stereotypical attitudes getting in the way of mutual goal setting. The desire or motivation to participate is increased when there is a clear need and a "rewarding" outcome. Partnerships can be powerful vehicles for bringing business and education together in ways that benefit both. Partners may approach the relationship motivated by different interests, but they will quickly realize how the accomplishment of the partnership objectives can benefit all parties involved.

In order to restructure education so that it can effectively prepare all youth, business leaders now see that they need a greater commitment, more hands-on policy development, and a broader view of the preparation of our future work force. Quality education for all is no longer an issue of community responsibility, or good corporate citizenship, rather, it is now a matter of community and corporation survival.

7. Commitment. In the *beginning* stages of partnerships, leadership often depends largely upon individuals committed to public-private collaboration. Over the long term, however, stability requires shifting that enthusiastic support from individuals to their institutions. The survey and interview respondents referred to this as developing *ownership*. In effective partnerships, partners felt that they "owned" the project, and this sense of ownership sustained them through the long hard process of development. References to *growing* a partnership appear repeatedly in the stories of effective programs. Projects that have thought to prepare the ground, plant the best seeds, and then water and fertilize their growth, produced successful gardens where members were willing to carry out the design of the project, communicate with each other and commit their organizations to implementation (Lacey & Kingsley, 1988).

Suggested Strategies

- Early involvement in planning. Give partners an opportunity to define the issues they feel are important; to choose to what extent they can be involved.
- Communication of expectations. Clear identification of roles, responsibilities and expected outcomes. Allow partners to help create their own job description.
- Shared decision-making power. Involve all partners in decisions that will directly affect them and/or their organization.
- Fulfillment of organizational and personal needs. Let partners decide how they want to be involved in the partnership. Provide suggestions and alternatives but let the partner make the final decision based on the needs of his/her organization, the

knowledge and skills they can provide, and the time they have available to devote to the project.

8. Retention. Retention is the art of keeping partners involved with school improvement projects year after year. Most members are willing to attend regularly and work hard, as long as their talents are used in tasks that involve them in the program, their recommendations are seriously considered, and they are given feedback about the recommendations and efforts. Partnership programs that retained their partners and attracted new ones were found to use a combination of the following strategies.

Suggested Strategies

- Train school personnel to work with business and community partners (what does business expect? How do they operate? How to work with a different "culture").
- Train business partners on how to work with education people (expectations in a classroom; developing a lesson plan; the school day).
- Train business partners on how to work with students (learning styles; discipline; "cultural" differences; how to structure an internship; how to be an effective mentor).
- Show partners concrete evidence of how they have made a difference in schools (a "pay off" for their participation).
- Clearly identify a reason or purpose to be involved in the partnership.
- Don't ask for help or suggestions unless you are willing to accept the help offered.
- Allow partners to have a variety of responsibilities and contact with different people.
- Let business decide how they want to be involved--they know what will work best for them.
- Let the partners know that they are appreciated.
- Identify one person to be "in charge" (director/coordinator) of the organization.
- Keep the partnership organized and running smoothly.
- Keep meetings to a minimum; have a purposeful agenda; establish clear goals; keep everyone informed.

- Avoid duplication of effort and membership; streamline the organization; share resources.
- Keep the lines of communication open; provide opportunities for open, honest communication between partners. Good listening skills are essential.

9. Recognition. The partnership plan should include opportunities to acknowledge and reward people and organizations that have played important roles in the partnership. Perhaps the greatest nurturing of an alliance comes through recognition of the contributions partners have made to the partnership effort. Reward mechanisms are important to every organization because they encourage attendance and involvement. Moreover, recognition efforts attract the attention and interest of other qualified people who may some day serve in the organization. Additionally, recognition brings public attention and good will to the organization because it demonstrates that the organization appreciates the efforts of its members (Lydeen, 1991).

Reward and recognition are especially important to partnership programs because most members are not paid for their efforts. Rewards should not be given indiscriminately but should be based on actual contributions to the committee's activity. The best types of rewards or recognition for partnership members are those that can increase productivity, improve committee interaction, and increase member satisfaction. The strategies need not be elaborate. Use this as an opportunity to be creative. Try to think of something other than an engraved plaque to give someone whom the organization wishes to thank. The cost of an average plaque will buy a nice dinner for two. Some effective ways of giving public recognition include:

Suggested Strategies

- Issue press releases announcing member appointments; frequent feature articles in the local newspaper.
- An annual report summarizing the contributions made by the partners.
- Nominations for awards at local, state, and national levels.

- Invite members to visit programs to see the results of their recommendations.
- Invite members to attend special events at the various institutions.
- Send personal letters to committee members about the results of their advice and recommendations.
- Be sure that announcements and reports made by administrators about the program include references to the committee members.
- Send personal notes in recognition of special events such as anniversaries, promotions, grand openings, etc. Include your thanks for the member's work on the committee.
- Send a letter of commendation and appreciation to the partner's supervisor and/or company president, explaining the good job being done by the member and thanking the company for its support.
- Place member's names on a display board at school or at the place of business.
- Provide as appropriate, teas, coffees, luncheons, or banquets. Use this as an opportunity for testimonials in support of the partnership program.

Plan for publicity by targeting opportunities and scheduling press releases and media events as appropriate. Remember, everyone profits from positive public exposure. Good press means good feelings of accomplishment among the participants, including the students.

10. Evaluation. Evaluation strategies should be designed to collect and analyze information to determine the accomplishments, strengths, and weaknesses of the partnership program. Ongoing evaluation is a useful tool to improve the program, justify continuation or expansion, gain additional community support, and facilitate future planning.

Suggested Strategies

- Good evaluation is involved at the beginning, the middle, and the end of the partnership plan. In the planning stages, it helps ensure measurable and practical objectives. During the course of the program, it can alert the partners to any changes that should be made. At the end, it will show how successful the partnership has been and can help in the revision of the old plan or development of a new one for any subsequent programs.
- Results of evaluation that are less than positive provide information helpful in improving the program and its management before real negatives ever appear.
- Evaluation data should be reviewed regularly, and evaluators (who can be insiders or the planning staff) should strive to translate data into constructive recommendations.
- Decision-makers should implement steps that lead to rapid remediation of program defects.
- To be useful, the evaluation system needs to combine on-going analysis of student and institutional benefits, regular program operations, long-term follow-up, and resulting program revision.
- The evaluation should include both quantitative and qualitative indicators of progress.
- The evaluation system should be kept simple. It must be easy to understand, free of business and education jargon, and presented in a form that permits clear corrective decisions.

Human Interrelationships Affect Partnership Efforts

This study revealed ten components that are critical to successful implementation of a business-education partnership. This study also revealed that there is more to creating a successful partnership than just implementing the components of a model partnership. The research showed that most successful business-education partnerships used similar organizational structures and employed similar implementation strategies; to some degree the ten components were present. The question still arises though, as to why some partnerships are *very* successful using the identified components and some partnerships seem to fail miserably using the same components? The level of success, especially sustained success, seems related to a combination of *human traits and interrelationships*. In a successful partnership model, all of the success components are present, but the level of success is related to *how* those components are implemented and *who* is doing the implementing. If all of the model "success components" are present then your chances of success are greatly increased, but if you have the right combination of people implementing those components, the partnership will probably be a huge success. In reviewing case studies of partnership models there were descriptive terms used that helped identify the "human factors." Words such as, strong commitment, positive attitude, personal involvement, champion of the cause, a believer, charisma, embraced the project, respect, trust, giving of time, consensus building, facilitation, cooperation, creative, innovative, and flexible were mentioned often in the literature and by project directors. It is the human factors that are often hard to measure, but they are qualities that need to be taken seriously when business-education partnerships are being planned.

Another issue that affects the success rate of a partnership are the "unexpected external variables." Typically, these are factors that are beyond the control of the partnership. Things like a sluggish economy, high unemployment rate, withdrawal of a funding source (especially if it is through legislative action), or a change in leadership (creating loss of strong support) can all seriously affect the quality of the partnership.

It is nearly impossible to create a "standard" model of a successful partnership that can be consistently replicated without taking into consideration the human factors and potential external variables. The development of a successful business-education partnership must address these factors. Partnership planners should include time for discussion about potential "what-ifs" (variables) that may affect their long-term plans and then develop a contingency plan to help deal with the potential variables. Planners also need to pay close attention to the identification, selection, and recruitment of key leaders and other potential partnership personnel.

The message to anyone interested in developing business-education partnerships is to incorporate all of the components identified in successful partnership models when creating the partnership, but be conscious of the human interaction factors as people are selected and recruited to be a part of the partnership project. It is the combination of *people* who will make the partnership successful.

Developing Sustained Involvement in Partnerships

A key issue mentioned often in the literature review and the survey data was the issue of how to get people involved and keep them involved in a partnership effort. The model partnership presented in this chapter provided information about successful ways to encourage and motivate potential partners to become involved. The research suggests that business involvement in education is limited only by the resources and creativity available in different states and localities. The most successful partnerships seem to address the unique circumstances faced by specific schools.

Most of the partnership projects that experienced problems with involvement did so because they weren't sure *how* to involve business. Their scope or range of ideas were very limited which didn't allow for diversity in organizational size or skill level of employer/employee. Because their target audience was narrow they weren't able to build a repertoire of partnership opportunities.

The lesson learned from this situation is that in planning there needs to be a clear vision about eventual partnership expectations and outcomes. When it comes time to recruit business and community partners, be prepared to offer a wide variety of options and let business *choose* how they want to be involved. Invite business people to brainstorm and help plan partnership options. Then be prepared to implement the suggestions. There were a wide variety of partnership options identified in the literature. Appendix D provides a list of partnership opportunities that organizations might use to help encourage involvement by business and community organizations.

As organizations develop their partnership plans, they need to keep one thing in mind: to reap the benefits, partnerships require a major commitment of time, personnel, and resources from the individuals and organizations involved. There is no such thing as a "part-time" partnership.

Recommendations

Much of what we now know about partnerships seems to be based upon "show-and-tell" stories found in journal articles, public relations pieces in newspapers, and from the sharing of brochures, materials, and panel presentations at conferences. Few of these carefully analyze the cooperative ventures. As a result of the research completed for this project it is recommended that the following four issues be examined.

1. There is a need for assessment of the long-term effectiveness of partnership efforts.

Through the review of literature several authors mentioned the fact that the long-term effectiveness of partnership models had not been researched. Most evaluation efforts have been focused on the short-term gains rather than the long-term effectiveness. During the past years, as the number and kind of collaborative programs have grown, program leaders concentrated their efforts on program planning and development, recruitment and recognition of partners, establishing program structures, and implementing program

activities. Evaluation, when requested, was done primarily on a one-time basis and focused on the documenting process, that is "what happened" and "what was accomplished." Most of these reports told about the number of hours volunteers served in schools, program moneys spent, number of pieces of equipment loaned, kinds of activities and how these activities were planned, implemented and managed. In general, partners were satisfied with these evaluations.

Currently, all partners in education, especially business, are faced with decisions regarding the use, distribution and management of more limited resources for educationally related programs and efforts. Partners need solid information upon which to base decisions about the allocation of their financial, in-kind and human resources. They need to know what is working. Partners now want to know more about both the *quantity* and the *quality* of partnership efforts. Bottom line, partners want to know what *are* the essential characteristics that will ensure the long-term continuation of a mutually productive business-education partnership?

2. There is a need for consistent, measurable standards that can be used to evaluate partnerships. This study revealed ten components that are critical to the development of a successful partnership. However, because there have not been standards established to evaluate partnerships there really is no accurate way to know whether or not the partnership has been successful. For the most part, partnerships have been very "personal" efforts created to meet the needs of a particular community. A partnership might operate very successfully in one community but can't be replicated successfully in another. What is identified as successful results in one community, may not create the same results in another community. Being able to clearly identify the standards for a successful partnership would help an organization create a working model that incorporated those expectations into their day-to-day operations.

3. There is a need for a standardized "language" used to describe successful partnerships. Because of the inconsistency in terminology used to talk about partnerships, researchers (or other interested persons) are left to interpret the words used to describe a "successful" partnership. One person may choose to describe the partnership as successful based on some "personal" factors; another person in the same partnership may not have experienced those same factors and as a result, feels the partnership was unsuccessful. There are no common words or terms used to describe "successful partnerships." Researchers could look at identifying a list of clear adjectives that would help evaluate (on a consistent basis) whether or not a partnership was operating successfully.

4. There is a need for regionalizing business-education partnership efforts. Even with all the positive reasons for involvement, business-education partnerships must overcome such real-world concerns as unemployment rates, the cost of equipment for education, the size of the community, and availability of business partners. The best hope for long-term success of partnership efforts is *regionalizing*--combining efforts with other educational institutions, such as community/technical colleges, four-year universities, other nearby school districts, and possibly community service agencies (Chambers of Commerce, Employment Security, Private Industry Council) that have a history of partnership efforts. When the organizational structure can be streamlined, resources shared (both human and monetary), and duplication of membership and effort reduced, the outcome will be a more efficient and productive partnership.

The Whatcom County Tech Prep Consortium is facing this dilemma. Whatcom County is a relatively small, isolated region within Washington State. Currently there are ten secondary and four postsecondary schools within this region. All of the schools have operated autonomously, creating their own programs, and using available "local" resources. To some degree, all fourteen schools have attempted to tap into the limited large resources (businesses) that the county shares. As the Consortium begins to develop

its partnership efforts, it will need to consider how to best use the county's limited resource pool to benefit all the partner schools involved in the project. The challenge will be to create a shared resource base and networking system between all the participating schools so that business resources in certain areas are not depleted (over-used); so that all schools have equal access to the same resource base; so that schools (teachers) are not working in isolation to create Tech Prep curriculum, but rather working in teams to share innovative and creative teaching ideas; so that all students are afforded an opportunity to participate in work-site learning opportunities that meet their educational needs.

Through diligent planning, partnerships can develop into broad, flexible, collaborative structures for pooling resources to meet a variety of needs. The possibilities in collaborative, regional ventures between the public and private sector are exciting. Improved communication between community leaders, business leaders and schools can result in programs that harness a variety of resources to help students educationally and occupationally.

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APPENDIX A

BUSINESS-EDUCATION PARTNERSHIP SURVEY,

COVER LETTER,

FOLLOW-UP MEMORANDUM

Thank you for agreeing to take part in this survey. As coordinators of Tech Prep programs we are all aware of the importance of business/education partnerships and we are committed to the successful operation of our Tech Prep programs.

I am currently doing graduate research on business/education partnerships...specifically, *how* to develop a model program. I have found quite a bit of information on the history of partnerships and how business can help in education settings, but I am finding very little on *how to* get them involved in the first place (the "forming" process) and once you have them involved how to *sustain* the relationship.

I thought it would be beneficial to survey the Washington State consortia coordinators to gather ideas and opinions about what has worked for you when developing your consortium's business/education partnership. I hope you will be willing to share your "best practices" in developing these partnerships. I am sure we could all benefit from each others successes (and sometimes failures), especially as we struggle through the early years of Tech Prep program development.

If you have any organizational models, examples, suggestions (on paper) for developing partnerships that you would be willing to share, please enclose copies with your survey. Please remember to acknowledge the source of the models, whether it is of your design or someone elses creation.

Thank you for any assistance you are able to give with this project. If you have questions in regards to the survey information, please feel free to call me. After gathering all the data I would be willing to share the results with any of you who might be interested.

Sincerely,

Linda

Linda Cowan
Whatcom County Tech Prep Coordinator
Whatcom Community College
237 W. Kellogg Road
Bellingham, WA 98226
676-2170, ext. 210
734-7589 (home)

BUSINESS/EDUCATION PARTNERSHIPS SURVEY
CREATING A MODEL

Coordinator's Name_____
Consortium Name _____
County Represented _____
Address _____
Phone Number _____
Number of secondary schools involved _____ **postsecondary schools** _____

If I have further questions about your survey answers would you be agreeable to a phone interview?_____

I would be interested in receiving the completed survey results: yes no

Please anwer the following questions as completely as possible.

1. Based on your experiences, why do you feel business/education partnerships are a critical element for a successful Tech Prep program?

2. What have you found (or believe) to be the most effective way(s) to bring business and education people together? What method/process have you used or tried?

3. How have you determined *who* to involve in the partnership?

4. What have you found (or believe) to be the most effective organizational structure to use in building a model business/education partnership? (a structure that ensures participation by all members)

5. What techniques have you used to (or believe will) *sustain* involvement by the business and education members?

6. What do you believe are 3 of the key characteristics of a *successful* business/education partnership?

7. What do you believe are 3 of the key *barriers* to implementing a successful business-education partnership?

8. Were there any information resources that you found most valuable when developing your business/education partnerships? Please provide the names/titles of several you found most helpful.

Please return the survey to Linda Cowan no later than May 10. Thank you.

MEMO

TO: Washington State Tech Prep Directors
RE: Business-Education Partnerships Survey...a reminder
DA: May 25, 1994
FR: Linda Cowan, Whatcom County Tech Prep Consortium

Now that everyone has their tech prep grant submitted, it's time to take a quick break, a few deep breaths and move on to the next project!

It just so happens, your next project is probably my survey!☺ Remember that survey.... the one you received at the last coordinators meeting (April 20) when we had the dinner meeting at the Red Lion (Tech Prep Conference). Does that ring a bell?? As I recall, I ordered the chicken pasta, Ted ordered some Japanese food, and Paul ordered steak and.....I gave all of you a copy of my survey entitled:

Business-Education Partnerships Survey, Creating a Model

If you think back, you may remember what you ordered for dinner and hopefully, where you put the survey (for safe-keeping I'm sure).

Since the completion of my masters thesis hinges on your survey response (don't feel guilty or anything), I would love to hear from you soon! If you can't find your copy of the survey, I would be happy to mail you another one.

Would you take a few minutes to respond to the questions and return the survey to me by **June 6.** Thanks for your support of this project.

Linda Cowan
Whatcom County Tech Prep Director
Whatcom Community College
237 W. Kellogg Road
Bellingham, WA 98226
(206) 676-2170, ext. 210
FAX 676-2171

APPENDIX B
INTERVIEW QUESTIONS

INTERVIEW QUESTIONS

1. What have you found (or believe) to be the most effective way(s) to bring business and education people together? What method/process have you used or tried?

2. How have you determined *who* to involve in the partnership?

3. What have you found (or believe) to be the most effective organizational structure to use in building a model business-education partnership? (a structure that ensures participation by all members)

4. What techniques have you used to (or believe will) *sustain* involvement by the business and education members?

5. What do you believe are 3 of the key characteristics of a *successful* business-education partnership?

6. Were there any information resources that you found most valuable when developing your business-education partnerships? Please provide the names/titles of several you found most helpful.

APPENDIX C

SUMMARY OF SURVEY AND INTERVIEW RESPONSES

SUMMARY OF SURVEY AND INTERVIEW RESPONSES

The following is a verbatim summary of the individual responses received for each of the eight survey questions and six interview questions. The interviews used survey questions two through seven only. Eleven surveys and three interviews were summarized.

1. Based on your experiences, why do you feel business-education partnerships are a critical element for a successful Tech Prep program?

- Since business is the ultimate recipient of the product (student) they know what is needed in the employee of tomorrow.
- Educators can no longer ignore the reality of the workplace.
- Education and economic development cannot be separated.
- Educators need to understand how academic and technical skills are being applied in the workplace to help update and validate curricula.
- Can help provide immediate job opportunities for students without an AA or BA Degree.
- Because the initiative (Tech Prep) is rooted in research which indicates that entry-level workers are inadequately educated for the world of work. The inadequacy can be explained in terms of a gap between educators' understanding of the new world of work and their part in it. Business/industry partners can help interpret what is needed.
- Business, labor and education are a critical element of successful Tech Prep programs because all three are customers and consumers. All three must work together as a team in order for the program to work.
- Business and industry are the employers of our graduates. We must be training students for their needs. Business, industry and labor are essential partners.
- Business people are often excited to be a part of a team in educating students for the world of work.
- They are key to making the curriculum relate to the real world for students. They will be the source for work-based learning opportunities for students.
- Business can help fund these efforts in the future if it proves beneficial to them.

- To ensure that the curriculum is relevant.
- To help get students out of the classroom and into the workplace.
- To help put pressure on the two systems to cooperate!
- Tech Prep is a program to prepare people for work; without participation of business, we wouldn't know what to prepare them for.
- The employers must be happy with the product (students) of the Tech Prep programs. If students are hired and prove unable to demonstrate a quality (enhanced skill) employee, the program will fail (another trendy education ploy). Hence, business must be supportive and involved in the decision-making about curriculum and expectations (outcomes).
- Business support and involvement lends credibility to Tech Prep movement.
- Programs must support community needs.
- Business can support public relations efforts; business can be very successful at helping you market the program. (two people said this)

2. What have you found (or believe) to be the most effective way(s) to bring business and education people together? What method/process have you used or tried?

- Used general advisory committee rosters from both K-12 and community college to contact people--used vocational directors contacts to recruit. Used labor unions to get labor reps.
- By focusing on actual jobs and providing opportunities for job shadowing by math and language arts faculty.
- Writing descriptions of the tasks people perform using math and communications. The descriptions can then be used for school-to-work and contextual learning activities.
- Personal face-to-face contact.

- It is most effective to establish common goals that are obtainable over short periods of time in order to build the relationship: e.g., identify specific jobs that can be filled by students receiving an AAS degree; validate competencies; establish work-related educational opportunities.

- Provide opportunities for joint projects. Business and labor have a strong tie to the elements of competency based instruction. Identification of competencies and the validations of tolerances in performance standards is a key role of business and labor. Education, labor and business having a joint interest are very willing to work together.

- The Economic Development Council has been an integral link to business and education in the community.

- In our small county, there is only one postsecondary institution. Furthermore, there exists a strong commitment by the business, industry and labor communities to education. The network of people interested in education is large.

- We surveyed many of our area businesses to determine their employee needs.

- We invited business people to be on our Tech Prep committees. They have worked with education to review our plans and curriculum. Most, after hearing about Tech Prep, respond very favorably to education making this change.

- We haven't discovered an effective way to bring business and education together. We have had meetings (which don't work well); one day conferences seem to work better; school events get parents involved but not businesses.

- I don't think there is a "most effective way", or a special method or process other than talking to business people, inviting them to participate and making it worth their time to participate.

- Contacting through the Chamber of Commerce and Occupational Advisory groups.

- I've been successful with advisory groups, planning on short, concise, noon meetings with business/labor and Tech Prep steering committee. I try to vary location of meetings--sometimes at workplace, sometimes on campus. Meeting times convenient to both parties is a challenge.

Interview Results

- Have a purpose for the meeting; a clear agenda.
- Identify a way(s) to actively involve the business partners; use their expertise to your advantage.
- Avoid asking for money and/or equipment--it seems to be the only reason that often gets used to involve business people in a partnership.
- Talk one on one or with a small group--make direct contact.
- Tell them about the economic development and education concerns of the community (county). Ask them to help you seek out other interested business people and invite them to develop a concept and lay plans together.
- Business people are more likely to be involved when invited by other business people (peer to peer).
- Invite employer groups to a no host breakfast and have a "powerful" speaker to sell Tech Prep, internships and partnership opportunities.
- Let them (business) design their own role--provide them with examples, suggest ways to help and them let them decide how they can best contribute.

3. How have you determined *who* to involve in the partnership?

- A lot was dictated by the Tech Prep RFP (request for proposal).
- We wanted representatives from areas of business which we were "Tech Prepping" (i.e., manufacturing, office skills, drafting/engineering tech).
- Partners were self-selected.
- Determined by program goals: program strands, special needs as well as state requirements. Others have been asked by virtue of their relationship to individual educators.
- Key leaders in business and labor that are customers of our students. All parties must be representative of who they represent and should not be sought out as an individual person. All should be involved in the occupations that the educational institutions are training for.

- From those initially invited, the ones who show an interest and then return to meetings; these people have become key members.

- We initially asked Boeing and some smaller local business people we knew were supportive of education and Tech Prep.

- From the schools that are involved in the consortium.

- Businesses are involved in specific career clusters (health occupations, business technology, etc.).

- Participants mandated by the State (RFP guidelines), whether they "fit" or not!

- We wanted to make our Workforce Development Alliance representative, so we determined several categories from which to choose. For example, big business, small business, labor, teachers, students, government, parents, etc. From those categories, we developed a list of names based on who we knew or who others told us about. From this list, the chiefs of the district, college, labor council and two chambers selected 27 people to be in our organization.

- Anyone willing to make the meeting--we have not had an excessive number of participants. Most people have joined in our consortium to represent themselves as individuals, not as leaders of a business, company, or firm.

- Friends (business) of vocational education in the past. We focused our contacts on the areas we are working on with Tech Prep grant.

- We looked for new thinkers and movers; name recognition was important.

Interview Results

- Identify a "credible" business person; someone who is a leader within the business community; someone who is respected by both business and education.

- Needs to be a spokesperson, a key player within the business community.

- Chambers of Commerce are your best source for potential business partners. Each Chamber generally has an Education Committee which can be very supportive.

- Private Industry Councils (PIC) are also a good source for partnership efforts.

- Work with people who are already organized rather than trying to reinvent the wheel.

4. What have you found (or believe) to be the most effective organizational structure to use in building a model business-education partnership? (a structure that ensures participation by all members)

- Individual school districts working with their local employers. Faculty and staff at all levels in business.

- Information, information!

- Similar to cultivating individuals for fund-raising. Must make it clear what is expected of each member. Telephone calls, lunches, social events help forge that relationship. Peer-to-peer relationships help: business-to-business to build a committee. They must also be made to feel that they have a direct relationship to students.

- Make certain that the individuals truly want to participate and select equal members of business (employers) and labor (employees) with a balance from small and large organizations.

- Many times the same people are involved in committees at the college, the high schools, and other business/education committees. The school districts and the college are trying to coordinate partnerships. With School-to-Work, Tech Prep, Workforce Training, local advisory committees to educational programs in high school and college, there is duplication of effort and membership. We are working on streamlining these committees and begin sharing our resources. For example, high schools and the college could form a partnership together for specific technical areas rather than each having a specific advisory group with similar membership.

- We have a committee system that is governed by an executive that makes decisions based on group consensus (see attached organizational chart).

- Depends on the geographical area. There needs to be an infrastructure within the high schools to maintain connections. Teachers do not even have access to office phones or have hours devoted to maintaining connections.

- So far, after five meetings, we only have a chairperson and an acting, mainly self-selected, executive committee that plans the agenda. The plan is to create subcommittees to work on specific issues such as marketing, internships, curriculum development, self-assessment, etc. We also have a set of by-laws that were developed by the planning group and have been ratified by the entire organization.

- Allow participation by individuals to the degree they are comfortable. *Do not allow* the vocational directors to control the creativity for gaining enhanced program.

Note: several directors attached organizational charts, by-laws, roles and responsibilities that had been developed for their consortium.

Interview Results

- Already organized groups work best.
- Chambers of Commerce can be very effective if you can get them involved.
- Meet no more than once per month. Keep meetings to a minimum.
- Keep meeting clear and focused.
- The Oregon "Compacts" and Alliances are good structural models.
- Integrate business into all areas of the partnership effort.
- Have as many business groups represented as possible--especially critical for successful implementation of career paths.
- Plan to implement in stages.

5. What techniques have you used to (or believe will) *sustain* involvement by the business and education members?

- Active involvement (always something for them to do; i.e., serve on technical committees).
- Providing them with information on how to get Tech Prep started in their company.
- Sending them to *Work Now and the Future* and other Tech Prep related conferences.
- Education also needs to be willing to change more rapidly or business will get impatient and leave.
- Keep focused on job competencies identification.
- Provide results of positive experiences.

- I'm quite new at this, having only just now felt comfortable with the people who are on my committee. But I believe it is unrealistic to expect that businesses will sustain a relationship that doesn't pay off for them. Educators will have to make their institutions friendly to businesses at all levels, and continue to encourage more teachers to go back to industry for professional development.

- Keep the number of meetings to a minimum. Call meetings when an agenda is put together that is meaningful. Call meetings at times when all can attend.

- Seek advice and don't spend all the time as "education" telling them what education is doing.

- Sustaining membership is sometimes difficult. Having too many meetings can be self-defeating. Meetings must have agendas and goals to be meaningful for members to attend.

- Really listen to them (business) and incorporate their suggestions.

- Produce programs that work--produce results.

- Produce better technically prepared students (a more qualified employee).

- Redefine teachers job descriptions (like co-op models) to include business relationships and time away from schools.

- We started out being committed to the need for active involvement by members. It took us two meetings to begin to figure out how to get people involved. We've done two things that have made a difference. First, we addressed the problem--that we hadn't foreseen--that most of the members didn't know what was going on with education. We created a giant wall chart showing where education was coming from, the drivers for change, the kinds of changes that are currently in process, what we hope the future will look like, and what we hope our group will accomplish. We presented this formally to the group. We then broke into small groups to discuss the chart. This got people talking about the issues that the alliance needs to address and, ultimately, to choose some piece to become personally involved with. We hope this process will be completed in our July meeting.

- The programs must be integrated into the "way things are done"--not a stand alone and individually funded program.

- Ownership--give them specific duties. Must see we are making progress; must be believers. Keep them informed, ask their opinions, make them feel proud of their involvement.

- Clearly set goals and establish objectives.

Interview Results

- Let business decide how to be involved.

- Need to speak their language--both education and business need lessons in each others "operating" languages.

- When planning, set up short term goals that can be reached and that will be successful.

- Provide quarterly reports, meeting minutes, newsletters; keep all participants informed.

- Send letters to employers thanking them for their help and support (helps them see and feel they are making a difference).

- Somebody has to be "in charge" or the organization/the partnership--to keep everyone involved and on task; to keep everyone informed; to keep the meetings focused and organized and the operation running smoothly. As long as there is someone there to keep the program operating and keep the contacts going, the business groups will stay involved.

- There needs to be a reason/a purpose to be involved.

- When you (education) ask for their (business) help, be prepared to *accept* their help.

6. What do you believe are 3 of the key characteristics of a *successful* business-education partnership?

- Diverse representation from small, medium and large businesses, labor and government.

- Willingness of employers to provide time for employees to serve on committees (labor has not done this).

- Leadership and commitment from the State to get business involved.

- Enlightened human resources departments.

- District leadership (vocational director, principal, assistant superintendent, superintendent).
- Luck!
- Clear communication of purpose.
- An agreed upon vision of what you want to accomplish ("one student in every area business by 1995").
- Specific goals, objectives, timetables, evaluation techniques, etc.
- Opportunities for active participation. (two directors said this)
- Business and education leadership support common goals.
- Business begins to be involved at all levels (classroom, community); education sends teachers for professional development.
- Business hires graduates of community colleges in greater numbers.
- Productive meetings that bring all participants together on common issues; productive results from the meeting (two directors said this).
- Education seeking advice and using as much as possible.
- Team work to fulfill joint needs or objectives.
- Commitment to education on the part of each member; commitment to Tech Prep and the reform process.
- A cooperative attitude among members (two directors said this); respect for various ideas; open communication.
- A single focus on improving education for students.
- Commitment of money/resources to free teachers/instructors to work on various projects.

- Participants have to be able to achieve some personal goals through the organization. The organization has to be able to *accomplish* something the members feel is of value. The meetings have to be designed to be worth the time of the participants.

- Participation in identifying the functional skills (competencies) needed by students to become productive workers, lifelong learners, and participating citizens; helping update program and evaluation techniques.

- Business partners can promote career awareness, career exploration, and informed career decision making; they can provide experiences in employability skills and school-to-work transition (job shadows, workplace mentoring, cooperative education, apprenticeships).

- Ownership.

Interview Results

- Has to be a clear purpose to meeting -- can't be just a meet and eat group. Try to avoid the "social" groups.

- Someone to do the work -- a coordinator to make it all happen.

- There has to be a coordinator between the consortium and business to keep people involved.

- Need to speak their "language" (business); avoid educational-ese; learn to use a business perspective.

- They have to see a reason to belong and feel they play a meaningful role in the partnership. They have to see they are making a difference.

- All partners need to be realistic in their expectations.

- Make sure you have "education's" support before contacting business people.

- Be ready to make changes. Changes can take time (business needs to know this) but education has to be willing to give and take and make suggested changes.

7. What do you believe are 3 of the key *barriers* to implementing a successful business-education partnership?

- Education, especially K-12 do not want them (business) involved.
- Businesses are unwilling/unable to give employees release time to serve on committees, etc. Small businesses especially, do not have the backup to fully participate.
- Small businesses cannot afford time away from their place of business.
- Business finds education slow to react, cumbersome and eventually become quite impatient.
- Superficial "community relations" involvement by employers.
- Education "fear" and/or entrenchment.
- Not focusing on analyzing the content of work to build a new curricular approach.
- No opportunities for active involvement and/or participation by business people.
- Lack of purpose.
- Lack of communication.
- Time: lack of it and also the cultural differences related to time (educators like to process, business wants action).
- Educators have limited resources to be able to offer professional development opportunities and to upgrade classroom resources.
- Not finding a meeting time that will meet all of the partners needs.
- Not developing a partnership from *willing* participants.
- Not developing an agenda that brings all partners into joint ownership.
- Too many time commitments by business, labor, industry to outside endeavors such as committee memberships.

- Goals need to be established for people to feel their time has been spent productively.
- Lack of goals, objectives or a clear purpose.
- Results must occur for commitment to long-standing partnerships. People must believe their commitment is making a difference in enhancing the educational process.
- Mistrust of each other; lack of trust.
- Not respecting the business perspective.
- Asking just for money.
- No network established.
- No infrastructure established to maintain the relationship.
- Time of all involved.
- Too much talk, too much process.
- No organizational goals, no reason for existing except to fulfill a requirement.
- Rubber stamp groups in which the members have no function except to ratify the decisions of the leadership.
- Need clearly stated expectations for involvement.
- "Turf" issues.
- Tradition -- this is the way we have always done it!

Interview Results

- Business is out to do business (their livelihood) and they don't always have time to come to meetings and participate in a variety of activities.
- They (business) get excited by the project, come to the committee meetings and then get stuck in committee conflicts, "political" issues, and turf wars. If this happens, business will stop coming.

8. Were there any information resources that you found most valuable when developing your business-education partnership? Please provide names/titles of several you found most helpful.

- *Getting Started in Tech Prep* (Center for Occupational Research and Development, CORD).
- *The Fifth Discipline* by Peter Senge (for TQM purposes).
- None: you have to struggle and create a job/curriculum focus wherever it can take hold.
- Articles from American Association of Community Colleges, American Vocational Association, National Center for Research in Vocational Education, and various business journals.
- My past years of experience have been most helpful to me. My job responsibilities included developing partnerships with local businesses (advisory committees, etc.).
- Carver Gayton and Rick Lengyl (Boeing representatives); mentioned by two people.
- *Tech Prep/Associate Degree* by Hull and Parnell.
- No: we have made it up as we went along. We knew what we wanted to happen and what we didn't want to happen and figured out what to do. We did use a consultant to help in the planning, which was very helpful in keeping a bunch of talkers focused.
- No: all are too "idealistic". Each local consortium will have to hammer out *local* agreements. Key word is *sustainable*. Plan to connect when, where, how, with whom as your organization sees fit.
- National Tech Prep Clearinghouse; Illinois Vocational Curriculum Center, Sangamon State University, Springfield, IL 62794
- Jobs For The Future; One Bowdoin Square, Boston, MA 02114; (617-742-5995)
- Boeing has the best example of how to establish an employer group-education partnership. They have tied the education curriculum to the work curriculum. Their internship (Tech Prep) program is considered a "model" program throughout the United States.

APPENDIX D

PARTNERSHIP OPPORTUNITIES FOR BUSINESS

Investing In Our Children...How Can We Help?

If you're an employer or employee, contact Whatcom County Tech Prep and offer to:

- deliver instruction covering "all aspects of the industry" as a guest speaker.
- provide tours of your facilities for educators and students--identify the various occupation activities and their education requirements.
- host open houses--at the schools and in your workplace.
- make a classroom presentation demonstrating workplace presentation styles.
- provide internships for students, teachers, and/or counselors to learn first hand how occupations have changed and provide a better understanding of the skill requirements.
- participate as a team teacher with arts and sciences and technical faculty (chemists with a chemistry teacher; engineers in math and science classes.
- teach classes to parents at your worksite about the careers of the future.
- provide or loan supplies and equipment to schools and colleges; provide up-to-date equipment so that students can be trained in the latest technologies.
- allow students and educators to take classes offered to your employees.
- participate in local career day programs to discuss occupations & future job prospects.
- speak on behalf of Tech Prep at community meetings; involve others.
- agree to monitor students' on-the-job performance via a SCANS survey.
- agree to review high-school transcripts before hiring students of any age.
- agree to preferential hiring for Tech Prep graduates who have met specified criteria.
- sponsor scholarships or awards (In Honor of Excellence) for students, teachers, and counselors; can provide incentives for excellent attendance, etc.
- provide industry training for instructors and counselors.
- serve on technical advisory committee to provide advice on curriculum changes & tech prep activities.
- participate in curriculum development with teachers.
- participate in job shadow programs--provide opportunities for students & teachers to shadow employees to better understand the job requirements.
- participate in a mentoring program--establish one-on-one or small group relationships with students to help them develop a better understanding of different career options.
- offer topical workshops for teachers that address current changes and issues in the industry.
- assist in program marketing--provide financial or material support for marketing efforts. Promote the program publicly to improve parental response.
- offer to serve as a Junior Achievement consultant.
- provide worksite opportunities for special needs students.
- serve as a club advisor (FBLA, FFA, etc.).
- provide summer job opportunities for students/teachers that relate to their career choice.

- create a video to teach "job readiness" skills (what employers expect).
- participate in adopt-a-school programs.
- provide flexible work hours for employees who choose to volunteer in school programs.
- work with a team of business people to create a handbook of real-life work problems or issues that teachers can use with students in the classroom (math, science, communication, human problems that need to be solved).
- provide space for classes to meet at your facility.
- business people work together to create a foundation that can financially support the needs of Whatcom County students (rather than business by business).
- fund grants for innovative curriculum projects related to career education.
- provide technology seminars--what's new in your business area?
- business and/or English teachers and/or classes teaming together to assist in writing or editing manuals for businesses.
- art students and/or teachers assisting in logo development for a small business.
- a newspaper providing journalistic opportunities and speakers for journalism students.
- a radio or television station providing equipment, experience, and curriculum in media.
- business sponsored essay or poster contests stressing business needs and concerns.
- cooperative development of a nature park or arboretum on company or school land.
- visits to trade shows: local dealers sponsor a student delegation or provide complimentary tickets to a nearby business/industry product fair.
- sponsor an event: Bridge Building, Olympics of the Mind, Science Fair, etc.
- company could pay the fees for a teacher to attend a workshop with one of its employees; the two can then help each other implement a project for students.

TECH PREP

There are many ways to create partnerships with schools. We can work together to create positive, meaningful educational experiences for students.

For more information about volunteering, please call:

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